The AGRICULTURAL HISTORY REVIEW

VOLUME IV 1956

PART I

*

PRINCIPAL CONTENTS

An Agrarian History of England
by H. P. R. FINBERG

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The Statistical Assessment of British Agriculture
by J. T. COPPOCK

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A Review of Balks as Strip Boundaries in the Open Fields
by H. A. BEECHAM

PUBLISHED BY
THE BRITISH AGRICULTURAL HISTORY SOCIETY

The British Agricultural History Society

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Membership is open to all who are interested in the subject and the subscription is ONE GUINEA due on 1 February in each year.

Details may be obtained from the Secretary, c/o Museum of English Rural Life,

7 Shinfield Road, Reading.

The Agricultural History Review

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THE

Agricultural History Review

Vol. IV Part I Edited by H. P. R. FINBERG 1956

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An Agrarian History of England

By H. P. R. FINBERG

AT a meeting held in London on the 14th of January 1956 the foundations were laid of a project which will doubtless be of considerable interest to members of the British Agricultural History Society.

The plan is an ambitious one. It is proposed to compile and publish an Agrarian History of England. The word agrarian is used here in its widest connotation: that is to say, if present intentions are fulfilled, the History will deal not only with arable and pastoral husbandry, but also with the marketing of produce, the distribution of landownership, rural housing, and the structure of rural society. It will be, in short, a complete social and economic history of rural England. And since any division of what is usually called the Highland Zone would probably be found unsatisfactory in the long run, it is likely that Wales too will be included. The theme will be pursued from the beginnings of systematic agriculture in the neolithic period down to whatever date in the twentieth century may be deemed a convenient terminal point.

It is obvious that a History conceived in these terms can only be contemplated as a long-term effort of co-operative scholarship. A minimum of seven volumes will be required, and several years must elapse before the first of them can be ready for the press. Nor can any assurance be felt or given that the volumes will come out in chronological sequence. As the work develops, the seven may easily become ten or twelve. There will be work here for many hands. And even if all the available talent could be mobilized, the attempt to cover so wide a field is bound to reveal serious gaps in our knowledge of the subject. Hence it will not be sufficient to compile a synthesis of existing knowledge. A great deal of new research will have to be undertaken with the set purpose of embodying the results in the finished work. On one point all who have discussed the project are unanimous: if the work is not to be carried out on the highest level of contemporary scholarship, it would be better not to attempt it at all.

How the research is to be organized, and how the undertaking is to be financed, are questions which cannot as yet be answered in detail. But it is thought that a beginning can be made by utilizing resources already in being. Our university departments of history, geography, and economics include appreciable numbers of postgraduate students who look to their supervisors and tutors for guidance in the choice of subjects for research. Here is a potential source of manpower, waiting to be activated in the direction of the History. From this point of view the History may be expected to fulfil the

secondary but valuable function of co-ordinating a great deal of research-work that at present lacks unity of aim.

In the meantime, an Advisory Committee has been set up, with the *doyen* of our agrarian historians, Professor R. H. Tawney, as its chairman.[1] The editor of this REVIEW will be general editor of the History. Particular responsibilities have yet to be allotted; but it may be taken for granted that each volume will require an editor of its own.

The initiative in this project comes from the Department of English Local History in the University College of Leicester. Many members of the British Agricultural History Society will be personally engaged in the enterprise, and all will probably wish to be informed of its progress, for the Society brings together in its membership those historians, economists, and working farmers whose interest in agrarian history is most alert. The pages of this REVIEW, therefore, will naturally reflect from time to time our interest in the project. Indeed, the REVIEW provides an eminently suitable channel of communication, of discussion, and even at times of healthy controversy, between those who will be working on the History. Therefore, without pledging the Society to give more than this degree of moral support, the Executive Committee has agreed that the project is one in which it may appropriately take a sympathetic interest.

[1] The members of the Committee, in alphabetical order, are as follows.

M. W. Beresford, M.A., *Reader in Economic History, University of Leeds*; E. G. Bowen, M.A., *Gregynog Professor of Geography and Anthropology, University College of Wales (Aberystwyth)*; J. D. Chambers, B.A., Ph.D., *Reader in Economic and Social History, University of Nottingham*; H. C. Darby, O.B.E., M.A., Ph.D., *Professor of Geography, University College, London*; H. P. R. Finberg, M.A., F.S.A., *Head of the Department of English Local History, University College, Leicester; editor of the Agricultural History Review*; Alexander Hay, *General Secretary of the Association of Agriculture*; J. W. Y. Higgs, M.A., *Lecturer in the History of Agriculture and Keeper of the Museum of English Rural Life, University of Reading*; R. H. Hilton, D.Phil., *Lecturer in History, University of Birmingham*; W. G. Hoskins, M.A., Ph.D., *Reader in Economic History, University of Oxford*; H. C. Pawson, M.B.E., M.Sc., *Professor and Assistant Director of the Department of Agriculture, King's College, Newcastle upon Tyne*; Stuart Piggott, B.Litt., F.B.A., F.S.A., *Abercromby Professor of Prehistoric Archaeology, University of Edinburgh*; M. M. Postan, M.Sc., M.A., *Professor of Economic History, University of Cambridge; editor of the Economic History Review*; C. E. Stevens, M.A., B.Litt., *Fellow of Magdalen College, and Lecturer in Ancient History, University of Oxford*; R. H. Tawney, Litt.D., F.B.A., *Professor Emeritus of Economic History, University of London*; (Mrs) I. Joan Thirsk, B.A., Ph.D., *Senior Research Fellow in Agrarian History, University College, Leicester*; Edgar Thomas, B.Litt., B.Sc., *Professor of Agricultural Economics, University of Reading*; Sir James A. Scott Watson, C.B.E., LL.D., D.Sc., *President of the British Agricultural History Society; formerly Chief Scientific and Agricultural Adviser to the Ministry of Agriculture and Fisheries*; Edith H. Whetham, M.A., *Gilbey Lecturer in Agricultural Economics and History, University of Cambridge*; David Williams, M.A., *Sir John Williams Professor of Welsh History, University College of Wales (Aberystwyth)*.

The Statistical Assessment of British Agriculture

By J. T. COPPOCK[1]

INTRODUCTION

"ENGLAND is fertile in paradoxes, and not the least of them is the fact that the most difficult thing of all others to ascertain is that which is done in this land of liberty, of general curiosity, and extensive information in the face of nature and under the light of the sun . . . nobody knows, even in the most summary way, what is doing on the thousands of acres spread before his eyes in any landscape of ordinary extent, much less in the county or in the country at large." So wrote *The Times* in a leader on the 18th of June 1867. The comment might more justifiably have been made two years earlier, for the occasion on which it was made was the collection of agricultural returns for the second year running, the numbers of livestock and the acreages of different crops having been collected from every county in Great Britain for the first time in 1866. These returns, which have been made in each succeeding year, form a body of source material for the study of agricultural change which lies virtually unexploited. Its importance is enhanced by the fact that the estate accounts, inventories, and surveys which are so valuable a source for earlier periods are at once less numerous and less detailed for the latter part of the nineteenth century. This is in part due to the fact that such material has not yet come to light; but it is primarily due both to the break-up of many estates and the loss and destruction of their records, and to the assumption by the State of the rôle of agricultural pioneer formerly played by landlords, whose powers to determine the agricultural character of their estates have dwindled ever since the Agricultural Holdings Act of 1875.

The original returns compiled by farmers are no longer extant, with the exception of some of recent date which are confidential, but parish summaries are available for nearly all years for every part of Great Britain.[2] While

[1] The study on which this paper is based was made possible by a grant from the Central Research Fund of the University of London.

[2] The parish summaries for England and Wales are held by the Collection of Statistics Branch, Ministry of Agriculture, Fisheries, and Food, Lytham St Anne's; those for Scotland prior to 1912 are in the Scottish Record Office, the later returns being held by the Department of Agriculture for Scotland. English and Welsh summaries are missing for all counties for 1868, 1871, 1872, 1892, 1893, and for some counties for other years; Scottish summaries are missing for 1868, 1871, 1872, 1873, and 1876.

less satisfactory than the records of individual farms would have been, these parish summaries provide a wealth of detail which is not available for any previous period for so extensive an area. Their utilization, and indeed that of the county and national figures also, demands some appreciation of their origins and of the way in which they were compiled. This paper reviews these origins and examines the development of the returns in the period from 1866 to 1914.

THE ORIGIN OF THE RETURNS

Three conditions had to be satisfied before agricultural returns could be successfully collected: the Government had first to be convinced of the usefulness of such information, a satisfactory means of collection had then to be found, and finally opposition on the part of landlords and farmers had to be overcome. In the development of the collection of returns the fulfilment of these three conditions did not take place by chronologically distinct stages; the need for the collection of statistics was only half-heartedly accepted by governments, the problem of finding adequate machinery bedevilled each of the various attempts made to collect returns, while opposition to their collection was manifest from the beginning. No doubt had there been a strong incentive to collect statistics means would have been found and opposition overcome; as it was, the success of the 1866 experiment, undertaken as it had been in a spirit of grudging acceptance, was ensured by the occurrence of a natural calamity, the cattle plague of 1865, which provided that incentive.

REAWAKENING INTEREST

The efforts to collect agricultural statistics, which had been made during the Napoleonic Wars through the agency of the parish clergy, were not immediately followed by any further attempt, and little interest seems to have been shown for over twenty years.[1] In the 1830's, however, discussion and experiment were resumed as part of the growing concern with the collection of statistics of all kinds. The change is well seen in the difference between the minutes of evidence of the Select Committees on Agricultural Distress in 1821, 1822, and even of that on Agriculture in 1833, and those of the Select Committee on Agricultural Distress in 1836;[2] in the former there is no mention of agricultural statistics, but in the latter numerous questions on the desirability of their collection drew frequent support from witnesses, one of

[1] H. O. Henderson, 'Agriculture in England and Wales in 1801', *Geographical Journal*, CXVIII, 1952, pp. 338–45, and W. E. Minchinton, 'Agricultural Returns and the Government during the Napoleonic Wars', *Agricultural History Review*, I, 1953, pp. 29–43.

[2] Parliamentary Papers, IX, 1821; V, 1822; VI, 1833.

whom testified that he could "not conceive a duty more imperative upon the Government than that of ascertaining the quantity of food that the people are likely to be supplied with."[1]

The first indication that the question of collecting agricultural returns was arousing official concern is to be found in a letter from the Board of Trade to the Treasury, dated 31 March 1832, in which permission was sought to establish a statistical branch;[2] the letter noted the difficulty of obtaining accurate estimates of agricultural produce and thought information might be collected by the machinery used for the enumeration of population. The Statistical Department of the Board of Trade was founded in that year, and the question was reported to be under consideration by Lord Auckland, the President of the Board of Trade.[3]

Growing public interest in the collection of statistics was epitomized by the foundation of the Statistical Society in 1834, and it was among statisticians rather than among agriculturalists that the revival of interest in agricultural statistics was first manifest. This fact is emphasized by the contrast between the *Journal* of the Statistical Society, in which there are a number of articles describing attempts to collect agricultural statistics, and the *Journal* of the Royal Agricultural Society, started only one year later in 1839, in which no mention of agricultural statistics occurs before 1855.[4] Emphasis in these articles in the *Statistical Journal* was laid on the statistical merits of, rather than the agricultural benefits to be derived from, such schemes as they describe.

A link between public and official interest was provided in the person of G. R. Porter, Head of the Statistical Department of the Board of Trade and Treasurer of the Statistical Society. In a paper read to the British Association in 1838 he made a cogent plea for the collection of agricultural statistics; he pointed to the backward position of Britain compared with other European countries where such information was regularly collected, and suggested that ignorance of the produce of our fields was an important reason for the fluctuation in agricultural prices. He thought that farmer and community

[1] *Report from the Select Committee appointed to inquire into the State of Agriculture.*—House of Commons, Sessional Papers, 1836, VIII (i and ii), (79, 189, 465), Questions 5002, 6318, 6971–6, 7217–8, 8167–75, 8746–50, 13527–9, 13560–4.

[2] P.R.O., B.T. 24/1, p. 2.

[3] *Report from the Select Committee of the House of Lords appointed to inquire into the best mode of obtaining Accurate Agricultural Statistics from all Parts of the United Kingdom.*—House of Commons, Sessional Papers, 1854–5, VIII (501), hereafter referred to as the Lords' Committee, Question 900, evidence of E. A. Bowring.

[4] C. Wren Hoskyns, 'On Agricultural Statistics', *Journal of the Royal Agricultural Society*, Series I, XVI, 1855, pp. 554–606.

alike would benefit from the collection of returns, which he estimated would cost between £20,000 and £30,000 per annum.[1]

FURTHER EXPERIMENTS

Official interest was translated into action in 1836, when the President of the Board of Trade, possibly with the 1801 returns in mind, addressed a letter to the parish clergy in Bedfordshire, requesting them in the public interest to supply answers to a questionnaire about the agriculture of their parishes in May of the preceding year.[2] Fifty-two questions were asked, covering the acreage of the parish, the number of farms and the type of tenure, the nature of the soil and its drainage, the acreage of crops grown, their yields, the rotation followed, the number of livestock and the quantity of livestock products, the extent and composition of woods and plantations, and the level of agricultural wages. The very complexity of the questionnaire may have caused the failure of the experiment, for only twenty-seven of the 126 parishes made returns, and not all these were complete. The failure was unfortunate, since it had been the intention to extend the enquiry elsewhere if the experiment had been successful.[3]

In 1844 the question was raised for the first time in Parliament, when Milner Gibson moved a motion in favour of the collection of statistics.[4] Gladstone, the President of the Board of Trade, affirmed the Government's interest, and said that they had tried several means but had been frustrated by their failure to find any adequate machinery. When the matter was raised the following year, Gladstone reiterated the difficulty of finding suitable machinery for collection, and said that they had considered "every class of officer who was *prima facie* capable of undertaking the task—the tax-collector, parochial officer, overseer, churchwarden, Excise officer, in fact every class of public functionary." Opinion was generally in favour of collection, only one member protesting against "these dictatorial attempts . . . to invade the sacredness of private property," and the Prime Minister, while suggesting that the matter was best left with the Government, undertook to lend any

[1] G. R. Porter, 'Suggestions in Favour of the Systematic Collection of the Statistics of Agriculture', *Journal of the Statistical Society of London*, II, 1839, pp. 291–6.

[2] Lord's Committee, evidence of E. A. Bowring, who suggested that Bedfordshire was chosen because it headed the alphabetical list of counties.

[3] House of Commons, Sessional Papers, 1844, XLV (177), pp. 1–6. Also reproduced in 'Agricultural Returns of Bedfordshire', *Journal of the Statistical Society of London*, I, 1838, pp. 89–96.

[4] *Parliamentary Debates*, LXXIV, 1844, p. 91; his reference to the report of 1816 is clearly a misprint for 1836.

weight it possessed or to apply any machinery it could command to secure the object.[1]

Parliamentary interest and the numerous communications it had received led the Board of Trade in 1844 to approach the Poor Law Board, to see if the machinery of local administration which the latter provided could not be used to obtain returns.[2] It was proposed that further experiments be tried and that these should be limited to securing the acreage of wheat, barley, oats, rye, peas, and beans, "to ensure a reasonable chance of success." The Poor Law Commissioners, whose views were sought, suggested that the success of the experiments would depend on the view taken by the Guardians, the majority of whom were farmers and landowners; it was most important, therefore, that they be convinced that the object was not fiscal, and that the collection would not be a charge on the local rates. As the Commissioners had no power to require information, they doubted whether it would be possible to collect complete returns.

Nevertheless, it was decided to proceed with further experiments, and in England and Scotland these were made in the harvest year 1844–5.[3] Much additional information was recorded, the acreages of many other crops, of grass, of woods, and of waste, and the numbers of different kinds of livestock also being collected. In Ireland the returns were collected in 1845, but here no livestock was enumerated, the list of crops was slightly different, and the acreage of bog was separately distinguished. Two Poor Law Unions, Basingstoke and Hartley Wintney in Hampshire, were chosen in England where the returns were collected through the Boards of Guardians. In Scotland and Ireland other agencies had to be used: in the county of Midlothian village schoolmasters collected the returns, and in the Bailieborough Union in County Cavan a private individual. The English experiment was only partially successful, no returns being received from the Basingstoke Union and only incomplete returns from Hartley Wintney; the Scottish and Irish returns, however, were completely satisfactory. This contrast, shown for the first time, between the ease with which Irish and Scottish statistics were collected and the difficulty of obtaining returns from English, and especially Southern

[1] *Parliamentary Debates*, LXXXIX, 1845, pp. 367–74.

[2] *Correspondence between the Board of Trade and other Public Departments relative to Agricultural Statistics.*—House of Commons, Sessional Papers, 1845, XLVI (265), pp. 1–4. The original correspondence is in P.R.O., HO 45, Regd. Papers, 824.

[3] *Summary of the Results of the Experiment which was tried under the direction of the Lords of the Committee of the Privy Council for Trade in the years 1845 and 1846 to obtain Agricultural Statistics in the Unions of Basingstoke and Hartley Wintney, in England, the county of Midlothian, in Scotland, and the Bailieborough Union in Ireland.*—House of Commons, Sessional Papers, 1847, LIX (468), pp. 1–9.

English, farmers, was to characterize all subsequent attempts to collect agricultural statistics.

So far the various attempts had made use of existing administrative machinery; but in March 1847 the President of the Board of Trade introduced "a Bill to make provision for the collection of agricultural statistics in England and Wales." It was proposed that the Superintending Registrars of Births, Deaths, and Marriages should appoint agricultural enumerators in their districts, and that these should send on the 1st of June each year to every occupier of more than three acres a schedule on which the acreages of crops and numbers of livestock were to be returned within fourteen days. The crops chosen were almost identical with those of the 1845 experiment, but the classes of livestock were very different. Penalties were proposed for neglecting to make a return or for making false statements. But the Bill never received a second reading, largely as a result of the unwillingness of the Chancellor of the Exchequer to defray the estimated cost of £30,000–£40,000.[1]

In the same year, however, administrative action did secure the collection of returns in Ireland. Here, in contrast to England, there was both a strong incentive and suitable machinery; there was also an absence of any class of large farmers who could effectively oppose the measure. The incentive was the risk of famine, and the Lord Lieutenant, Lord Clarendon, expressed to the Treasury his strong feelings about the need for accurate statistics. He called for Treasury sanction for the expenditure of up to £4,000 on their collection.[2] The returns were collected by the constabulary, an established and centrally controlled body; they were voluntary and covered both livestock and crops.[3] The success of the enterprise was undoubtedly due in part to its supervision by Captain Larcom, of the Royal Engineers, who had already had considerable experience of the collection of statistics, and had been responsible for the inclusion of much agricultural information in the Irish Census of 1841. The returns continued to be collected annually by the constabulary, though responsibility was transferred to the Registrar General in 1853. At first they met with some hostility owing to the belief that they were connected with new taxation; but the existence of an obvious need and of

[1] House of Commons, Sessional Papers, 1847, Public Bills, I, p. 1; *Parliamentary Debates*, XC, 1847, p. 1099; XCVII, 1848, p. 540.

[2] *Return of the Particulars of the manner in which 2,000 l. was expended in obtaining Statistical Information relative to the Agricultural Produce of Ireland; and a copy of the order under which the Inquiry is conducted.*—House of Commons, Sessional Papers, 1852, XLVII (491-I), pp. 1–2.

[3] Details of the method of collection are given in *Returns of Agricultural Produce in Ireland in the year 1847*, pp. 1–6. House of Commons, Sessional Papers, 1847–8, LVII (923).

efficient machinery ensured collection without much difficulty, and opposition greatly decreased in the next few years.[1]

CONTRASTS IN ENGLAND AND SCOTLAND

The hope of the *Economist* that "so useful an example as has been set by the Irish Government may soon be followed as regards England and Scotland" was, however, only partially fulfilled.[2] Nineteen years were to elapse before the regular collection of statistics was begun in either country; but in Scotland, through the enterprise of the Highland and Agricultural Society, statistics for the whole country were obtained for each of the years 1854–7. The Society had first approached the Government on this matter in 1847, and representatives had had an unofficial meeting with the Vice-President of the Board of Trade. In 1849 the East of Berwickshire Farmers' Club had again demonstrated the possibility of collecting statistics in Scotland, and when the Society once more approached the Board of Trade in 1852, it secured Treasury support for the collection of agricultural statistics in 1853 in the three counties of Haddington, Roxburgh, and Sutherland. The acreages of various crops and of grass were collected, as well as those of sheep walks, of houses and gardens, of woods and waste, while the numbers of different classes of livestock, including for the first time horses, were also ascertained. Collection was made in May through the agency of enumerators, who delivered, collected, and checked the returns, which were then consolidated by the Secretary of the Society by districts, comprising several parishes with similar agricultural conditions.[3] Estimates of the yields of wheat, barley, oats, beans and peas, potatoes, turnips, turnip seed, mangolds, and carrots were also made in each district by committees consisting of the enumerator and prominent farmers.[4] The experiment was highly successful, and only three persons failed to make returns.[5]

In England the Royal Agricultural Society played no comparable rôle, though a deputation from it was reported to have waited on the Prime Mini-

[1] Lords' Committee, evidence of W. Donelly, Questions 465, 483, and 486.

[2] VI (9 September 1848), p. 1019.

[3] Lords' Committee, evidence of E. A. Bowring, Question 909; evidence of Hall Maxwell, Questions 3 and 5.

[4] *Copy of a letter from the Secretary to the Highland and Agricultural Society of Scotland to the Board of Trade, transmitting Estimate of Crops in the Counties of Roxburgh, Haddington, and Sutherland, in the Year 1853.*—House of Commons, Sessional Papers, 1854, LIX, p. 1.

[5] *Copy of a letter addressed to the Board of Trade by the Secretary of the Highland and Agricultural Society of Scotland, transmitting Abstract of Returns of the Agricultural Statistics of the Counties of Roxburgh, Haddington, and Sutherland.*—House of Commons, Sessional Papers, 1852–3, CI (917), p. 1. Particulars of these three holdings were in fact, supplied by the enumerators.

ster, probably in the 1840's, to press the question of agricultural statistics, and it joined with the Highland Society in a deputation to the Government in 1853.[1] However, the Government decided to make a further experiment in the late autumn of 1853, using official machinery and confining the information to be collected to acreages and numbers of livestock. The schedules on which the returns were made were based on those used by the Highland and Agricultural Society, the slight differences reflecting differences in the agriculture of the two countries; thus turnip seed was omitted, hops and chicory were included, and there were differences in the definition of temporary and permanent grass.[2] Returns were collected from all holdings of two acres and above, the acreages of smaller holdings, of woods, and of commons being supplied from the Rate Books. Two counties, Norfolk and Hampshire, where it was thought that chances of success were greatest, were chosen. Boards of Guardians again supplied the machinery of collection; statistical committees were set up in each Union, and generally the Clerk acted as classifier and the relieving officers as enumerators. In Norfolk three Unions declined to co-operate, and there was considerable opposition in others, particularly from the Fen border parishes of the Thetford and Downham Unions. Nevertheless, the energy of the Poor Law Inspector responsible, Sir John Walsham, secured returns from all but $2\frac{3}{4}$ per cent of occupiers, though some of the returns were "incomplete" or "imperfect." In Hampshire, too, although "the zealous hostility of some opponents" created "great subsequent difficulties," returns were obtained from 92 per cent of occupiers, or $96\frac{1}{2}$ per cent if the Isle of Wight, where most of the opposition was concentrated, was excluded.[3]

The success of these two experiments encouraged the Board of Trade to try a more extended experiment in 1854, using the same machinery, and a sum of £13,000 was voted for this purpose.[4] In England, Hampshire and Norfolk were again chosen, together with Berkshire, Leicestershire, Shropshire, Suffolk, Wiltshire, Worcestershire, and the West Riding of Yorkshire; two Welsh counties, Denbigh and Brecon, were also selected. In Norfolk and Hampshire estimates of crop yields were to be made by the Statistical Committees, but elsewhere returns were limited to acreages and to numbers of livestock. The items collected were little different from those of the previous

[1] Lords' Committee, evidence of E. A. Bowring, Questions 916 and 917; according to W. Miles, the reason for this inactivity was that the Society was precluded by its charter from discussing controversial political issues (*ibid.*, Questions 805–9).

[2] Lords' Committee, evidence of Sir John Walsham, Question 157.

[3] *Reports of Sir John Walsham and Mr Hawley on the Agricultural Statistics of Norfolk and Hampshire.*—House of Commons, Sessional Papers, 1854, LXV (1761), pp. 1–23.

[4] *Parliamentary Debates*, CXXV, 1854, p. 1036.

year, but some attempt was made to adopt the same nomenclature in Scotland and England. As in the previous year, the returns were collected in the autumn, though the proposed schedule bore the date 1 July.[1]

In Scotland, the Highland and Agricultural Society undertook to secure returns from the whole of Scotland, and nearly 1,100 tenant farmers acted as enumerators and committee members. As some difficulty had been encountered the previous year because of the unwillingness of farmers in certain parts of the country to let neighbours see the details of their crops and stock, occupiers were given the opportunity of sending their returns direct to the Society. Lower limits to the size of holding were introduced, returns being collected only from farmers with a rental of £20 p.a. or more in Highland Districts, or £10 or more in Lowland Districts. The schedules were almost identical with those of the previous year, and estimates of yields were again obtained. Some delay was experienced because of difficulties in procuring accurate lists of occupiers, and collection took place between 1 September and 6 November; nevertheless, the experiment was again highly successful, schedules unreturned amounting to less than 1/5 per cent. As Hall Maxwell, the able Secretary of the Society, reported, "the Scotch farmers, as a body, at once recognized the importance and utility of the measure, and endeavoured to support and forward it by readily and faithfully affording the information required from them."[2]

The situation in England was very different; for 7 per cent of holdings in the selected counties no return was received, and only the West Riding was considered satisfactory, returns being made for 99·3 per cent of holdings in the western half of the county.[3] In Hampshire and Wiltshire, on the other hand, the experiment "had not attained that completeness which renders it serviceable for practical purposes"; five Boards of Guardians refused to co-operate, and no return was made by either occupier or enumerator for 16·7 per cent of holdings. The produce estimates were "even more unsatisfactory" than the acreage returns, and in Norfolk only four Unions supplied estimates.[4] The President of the Board of Trade reported that the results

[1] *Reports of Poor Law Inspectors on Agricultural Statistics (England) 1854.*—House of Commons, Sessional Papers, 1854–5, LIII (1928).

[2] *Report of the Highland and Agricultural Society of Scotland to the Board of Trade on the Agricultural Statistics of Scotland for the Year 1854.*—House of Commons, Sessional Papers, 1854–5, XLVII (1876), pp. 3–4. Also Lords' Committee, evidence of Hall Maxwell, Questions 6, 7, 8, 57.

[3] J. Lewis, 'On Agricultural Statistics and the Cattle Census', *Journal of the Royal Agricultural Society*, 2nd Series, II, 1866, p. 398; Parliamentary Debates, CXXXVIII, 1855, pp. 1782–3; *Reports of Poor Law Inspectors, loc. cit.*, Report of H. B. Farnall, p. 91.

[4] *Ibid.*, Reports of W. H. T. Hawley, pp. 6, 13; Sir John Walsham, p. 39.

did not justify the Government in following up the plan which had been adopted of further extending the experiment.[1]

This failure seems to have been due both to weaknesses in the machinery of collection and to opposition from farmers. It was felt that Boards of Guardians were unsuited for the purpose, which was held to conflict with the duties for which they were appointed. Difficulties were not confined to Guardians, for both Clerks and Relieving Officers felt themselves underpaid, and were sometimes unwilling to assist in the collection of returns; in the Wantage Union, for example, no enumerator could be found in fifteen of the thirty-four parishes. The opposition of farmers was founded both on fear and on principle; some were apprehensive that the information would be used either by landlords against their tenants or by the Government to justify new taxation, while others regarded the returns as inquisitorial and an unwarranted interference in their affairs. Political prejudice was also said to contribute to the hostility. Opposition was widespread; in the Drayton Union, most of the occupiers burnt or otherwise destroyed the schedules left with them, while in the Samford Union opposition was such that the Guardians felt themselves compelled, though reluctantly, to recommend that no further attempt be made to obtain the information required. The accuracy even of some of the returns which were made was suspect; thus, in the Knighton Union, occupiers were said to have understated their stock to avoid the taxation which they feared, while in Worcestershire attention was drawn to the inaccuracy of the Rate Books, on which part of the return was based. Opposition was dramatically epitomized by the Shropshire farmer who returned his blank schedule neatly torn in four pieces with the inscription "The idea of such questions! What next?" None the less, the extent of the opposition can be exaggerated; the more intelligent farmers were said to be in favour, while the proportion of returns received was very comparable with that obtained in 1866. The Poor Law Inspectors who reported on the scheme were generally of the opinion that compulsory powers were necessary, though there were differences of opinion about the suitability of the Poor Law machinery, especially the Boards of Guardians. But although the Poor Law officers were once more suggested as a suitable channel for the collection of returns, no further experiments were undertaken in England and Wales until the collection of the returns was begun in 1866.[2]

[1] *Parliamentary Debates*, CXXXVIII, 1855, p. 1783.

[2] *Reports of Poor Law Inspectors*. Reports of W. H. T. Hawley, pp. 6–7, 13; G. Pigott, pp. 56, 57; A. Doyle, pp. 77–8, 79; J. T. Graves, pp. 70, 73; Sir John Walsham, p. 34. See below, p. 18; the 1866 figure of 5½ per cent reflects the good response in the northern counties which were poorly represented in this experiment.

In Scotland, on the other hand, complete and accurate returns continued to be collected until the summer of 1857. In 1855 all schedules were completed, there being only about sixty cases of absolute refusal or opposition, while in 1856 returns were still "very freely made."[1] Duplication of returns had provided some check on their accuracy, but independent confirmation was obtained in 1857 when the crops in the county of Linlithgow were recorded and measured on maps by the Ordnance Survey, the difference between the returns and the computed acreage being only 316 acres out of a total of 25,999.[2] One fundamental change was made in the schedule in 1855: so much difficulty had been experienced in obtaining the acreages of permanent grass and sheep-walks that it was decided to confine the acreage return to the arable area only.[3] Other minor changes were made in the schedule, particularly in the classification of livestock. Unfortunately the collection of returns was not continued beyond 1857. A disagreement arose between the Highland and Agricultural Society and the Treasury, who held that the Society should account for every penny of public money, supporting each item with vouchers, while the Society considered itself to be only the agent of the Board of Trade and not subject to the same standard of accounting as a government department. The Treasury, however, remained adamant, and the Society felt obliged to sever its connections.[4] As a result continuous records in Scotland date only from 1866, as in England.

THE SEARCH FOR SUITABLE MACHINERY

Attempts to find satisfactory machinery continued. In 1854 a Select Committee of the House of Lords had been appointed to investigate the best way of collecting agricultural statistics, the importance of which "is now so generally admitted."[5] It reported in favour of the collection both of acreages and numbers of livestock, and of estimates of produce, and thought that the Poor Law machinery should continue to be used, and that the returns should be compulsory. A Bill embodying these recommendations was introduced

[1] *Copy of the Report of the Highland and Agricultural Society to the Board of Trade, on the Agricultural Statistics of Scotland, for the Year 1855.*—House of Commons, Sessional Papers, 1856, LIX (2), p. 2; also *Report to the Board of Trade on the Agricultural Statistics of Scotland for the Year 1856.*—House of Commons, Sessional Papers, 1857, XV, p. 8.

[2] *Reports to the Board of Trade on the Agricultural Statistics of Scotland for the Year 1857.*—House of Commons, Sessional Papers, 1857–8, LVI, p. 4.

[3] *Report on Agricultural Statistics for 1856, loc. cit.*, p. 2.

[4] *Correspondence relating to the discontinuance by the Highland and Agricultural Society of Scotland of the collection of the Agricultural Statistics of Scotland.*—House of Commons, Sessional Papers, 1857–8, LVI, pp. 1–54.

[5] Lords' Committee, p. 3.

into the Lords in 1856; it authorized the Poor Law Board to appoint collectors, who would obtain on the 1st of July each year a return of crop acreages and livestock numbers from all holdings of two acres and above, and prescribed penalties for non-compliance; the schedule to be used resembled that used in the extended experiment of 1854. Provision was also made for the appointment of crop estimators. The Bill was passed by the Lords without much opposition; but in the Commons no agreement could be reached, and even many who supported the collection of statistics were unwilling to accept the sanction of compulsion, or doubted the suitability of the Poor Law Board. The Bill was accordingly withdrawn, with the promise of a Select Committee in the following session to re-examine the question.[1]

No Select Committee was in fact appointed. But in 1857 a further Bill was introduced by Caird and Garnett. Caird had earlier favoured the appointment of a small number of competent men who would collect acreage returns and make estimates of yields; he had also supported the principle of compulsion.[2] In his Bill, however, he proposed that the Registrar-General should employ the Superintending Registrars, or other suitable persons, to distribute schedules to all occupiers of two acres or more. The returns were to be collected on 1 June, and were confined to crop acreages, the list of crops being very similar to that prescribed in the previous Bill. The Registrar-General was also to appoint Inspectors of Agricultural Statistics, who would make periodical checks on the accuracy of the returns. Where no returns were made, powers of entry for the purpose of ascertaining the acreages of crops were to be authorized. Opposition was strong, particularly against this last provision; the Bill was said to be inquisitorial and useless, and though Caird offered to amend the offending clause in committee, the Bill failed to get a second reading.[3]

Official attempts to find suitable machinery for the collection of the returns continued. In May 1861 a circular letter was sent from the Home Office to the Chairmen of Quarter Sessions in England and Wales, suggesting that the constabulary might be used for this purpose, as in Ireland, and asking the opinion of magistrates on the extent of the information to be obtained and the frequency of its collection; a schedule identical with that proposed in Caird's Bill was enclosed with the letter. Only eighteen out of fifty-nine chairmen

[1] House of Commons, Sessional Papers, 1856, Public Bills, I, p. 1; also *Parliamentary Debates*, CXL, 1856, p. 1770; CXLI, 1856, pp. 629–33; CXLII (1856), p. 1771.

[2] Discussion on paper by L. Levi, 'On the importance of a correct system of Agricultural Statistics', *Journal of the Society of Arts*, II, 1854, p. 337; and Lords' Committee, evidence of James Caird, Question 269.

[3] House of Commons, Sessional Papers, 1857, Public Bills, I, p. 27; *Parliamentary Debates*, CXLVII, 1857, pp. 200–1; CXLIX, 1858, pp. 1887–1919.

reported in favour of using the constabulary, though the opposition of the majority was not so much to the idea of statistics as to the suggested machinery of collection. Opposition to the returns themselves was, however, voiced; in Berkshire it was said that the farmers regarded the returns as an interference with their private affairs, while from Gloucestershire the fear was expressed that discrepancies might be revealed between rotations prescribed by leases and those actually followed. The idea of using the constabulary was not, therefore, pursued further.[1]

Unofficial attempts to establish the collection of statistics continued. Caird was not deterred by the rejection of his Bill, and in June 1864 he proposed a motion in the Commons, "That in the opinion of this House the collection and early publication of the Agricultural Statistics of Great Britain would be in the Public Interest." Opponents questioned the accuracy and usefulness of such returns as could be collected; other members were sympathetic but doubted the value of an airy motion. Caird, however, was unwilling to withdraw, as he wished to stimulate the Government into action, and his motion was in fact carried against the wishes of the Government. Nine months later he asked whether the Government intended to give effect to the resolution, and was told by the President of the Board of Trade that, while no legislation was to be introduced, a plan had been suggested whereby voluntary returns of the acreage of crops might be obtained. On the 8th of June 1865 a vote of £10,000 to defray the cost was approved.[2]

THE 1866 RETURNS AND THEIR DEVELOPMENT

It had been intended at first to collect only the acreages of crops.[3] But in 1865 there was a severe outbreak of cattle plague, and the Royal Commission which was appointed to investigate it was concerned at the absence of data concerning the numbers of livestock. On 24 October the Secretary of the Royal Commission wrote to the Board of Trade representing "the importance of obtaining correct information, respecting the number of horned cattle and sheep existing in the country."[4] As a result of this pressure it was decided to obtain livestock figures as well, and these were in fact collected

[1] *Copy of the Circular sent by the Secretary of State to the Chairmen of Quarter Sessions in England and Wales, with reference to the Collection of Agricultural Statistics; with the Resolutions adopted thereon; and of any correspondence relating thereto.*—House of Commons. Sessional Papers, 1862, XL (205), pp. 1–31.

[2] *Parliamentary Debates*, CLXXV, 1864, pp. 1362, 1383; CLXXVIII, 1865, p. 560; CLXXIX, 1865, p. 1312.

[3] *Parliamentary Debates*, CLXXXIX, 1867, p. 1104.

[4] *First Report of the Commission appointed to inquire into the Origin and Nature etc. of the Cattle Plague.*—Appendix E, House of Commons, Sessional Papers, 1866, XXII (3591), p. 180.

and published before the acreage figures. On 5 March 1866 returns were collected from all owners of livestock, including proprietors of town dairies, of the numbers of milk cows and other cattle of two years and over and those under two, of sheep of one year and above, and of those under one year, and of pigs, the results being published on 7 May.[1]

On 25 June the acreage figures were collected as originally planned. Schedules were sent to every occupier of more than five acres of land, requesting the acreages of wheat, barley, oats, rye, beans, peas, potatoes, turnips and swedes, mangolds, carrots, cabbage, kohl-rabi and rape, hops, vetches, lucerne and any other green crop, rotation grasses, bare fallow, and permanent grass. Both livestock and acreage returns were collected for the Board of Trade through the agency of the Board of Inland Revenue, whose Excise officers were distributed throughout the country and were thus well placed to distribute and collect the forms. The procedure adopted was simple: the officers prepared lists of occupiers from the Parish Rate Books and from the Income Tax Assessments, and sent schedules to each occupier through the post. The returns, when received, were consolidated in parish summaries, and the original schedules destroyed after the lapse of one year. When occupiers declined to make a return the officer or the local Assessor of Taxes was to make an estimate; officers were instructed to compare their estimates with the total acreages given in the Rate Books, and, in the event of difficulty, to seek help locally from magistrates, clergy, agents, or others acquainted with the locality.[2]

Although satisfactory machinery, which incidentally had been thought unsuitable by the Government in 1846, had now been established, the problem of overcoming the opposition of farmers and landowners remained. Undoubtedly the occurrence of the cattle plague at that particular time facilitated the task of collecting the statistics; as one observer put it, "no one who has watched the current of public opinion in the past twelve months will doubt that to the calamity which has recently befallen our flocks and herds is due in great measure the present favourable disposition of farmers as a body to contribute for public use information which but a short while ago they had a strong objection to divulge."[3] Not only did the cattle plague weaken the hostility shown by English farmers to the returns; it was responsible for the fact that any livestock figures were collected.

[1] *Returns relating to Livestock in the United Kingdom* —House of Commons, Sessional Papers, 1866, LX, pp 1–6. The date is given in J. Lewis, *op. cit.*, p. 406.

[2] Circular to Collectors, Excise General Order, 31 May 1866; also Excise General Order, 30 May 1868.

[3] J. Lewis, *op. cit.*, p. 415.

But while the cattle plague diminished opposition it did not eradicate it, and its effects were short-lived. That this was so is indicated by the contrast in completeness between the livestock and the acreage returns. In Great Britain estimates were necessary for only 1·5 per cent of the cattle, 2·5 per cent of the sheep and 2·0 per cent of the pigs, and even in a county such as Hertfordshire, where opposition was strong, the figures were only 6·0 per cent, 8·6 per cent, and 5·4 per cent respectively. No figure of the proportions of the acreage returned which had to be estimated was published for the whole country, but it can hardly have been much less than 10 per cent by area, and in Hertfordshire was as high as 45 per cent.[1]

These contrasts in the proportion of estimates reflect the varying intensity of opposition, both as between the livestock and the acreage returns, and between the different parts of the country. As on previous occasions, there were marked differences between Scotland and England; the Inland Revenue Commissioners noted the facility with which the information was collected in Scotland compared with the reluctance and refusal often encountered in England.[2] In Scotland only ½ per cent of the farmers declined to make returns, while in England the figure was 5½ per cent. It was mainly in southern and eastern England that opposition was concentrated; in Cumberland only ½ per cent of the farmers refused to make returns, and in Yorkshire, Lancashire, and Northumberland only 1 per cent, but "in Hertfordshire, Huntingdonshire, and some other counties, as many as 30 to 37 per cent declined."[3] Even within these broad regional contrasts, there were marked differences between adjacent counties and even between adjacent parishes; 13 per cent of the acreage returned in Buckinghamshire was estimated, compared with 45 per cent in Hertfordshire and only 7 per cent in Oxfordshire, and with 0 per cent, 45 per cent, and 74 per cent respectively in the three neighbouring Hertfordshire parishes of Essendon, Little Berkhamstead, and Bayford.[4]

Much of this opposition was attributed to the hostility of landlords rather than of farmers. The President of the Board of Trade thought that certain substantial landowners had taken a prejudice against the returns and had

[1] *Return of the Total Number of Cattle, Sheep and Pigs, Returned by Occupiers of Land, and Estimated by Collecting Officers, upon 5th March, 1866, distinguishing the Number Estimated by the collecting officers, in default of Returns by Occupiers, with the Percentage Proportion of the Number So Estimated.*—House of Commons, Sessional Papers, 1866, LIX (528), pp. 1–4. The acreages are calculated from the Parish Summaries, Hertfordshire, 1866.

[2] *10th Report, Commissioners of Inland Revenue*, 1866, pp. 47–8.

[3] *Parliamentary Debates*, CXCVII, 1869, p. 834. It is not clear to what these figures refer; it seems likely that they are average figures for the first three years.

[4] Calculated from the 1866 parish summaries.

advised the farmers not to fill them up, while the Commissioners of Inland Revenue reported that "throughout large tracts of country the farmers, at the instigation of some great landowner, had set our officers at defiance." Generally it was the occupiers of large farms who objected to making returns, and the acreages of such farms were more difficult to estimate. Some of the returns were deliberately falsified; one farmer, occupying fifty acres, returned over 300, including ten acres of hops, and also 1,000 pigs, "a statement evidently as untrue as the other portion of the return." Officers experienced insult and annoyance; the date of collection was said to contribute to this, since the farmers were then engaged on their hay harvest, and "very irritable when called upon by a Government Officer to leave their occupation for the purpose of detailing to him all the particulars of their holdings."[1]

As on previous occasions, the amount of opposition must not be overemphasized; the majority of farmers made returns without trouble. Perhaps more typical of the majority was the Bedfordshire farmer who noted briefly in his diary on 24 February 1866: "On Monday next, I have to send the number of all my Neat Cattle, and Sheep, and Pigs, in a form sent by the Board of Trade, it is a very general thing yet quite new on account of the Plague."[2]

Despite the opposition, and despite the inevitable adjustments necessary in the machinery of collection, there was on this occasion no turning back. The returns continued to be collected, though in 1867, as in subsequent years, the acreage and livestock figures were obtained simultaneously on 25 June, a date altered in 1877 to 4 June. Because of the need to collect returns of all livestock the lower limit of five acres was abandoned, and returns were obtained in 1867 from all occupiers of land. In 1869 a lower limit was again imposed when a minimum size of a quarter of an acre was adopted; this figure was maintained until 1892, when the present minimum of over one acre was substituted.[3] The returns remained voluntary until the Agricultural Returns Act of 1925 provided legal sanction for their collection, but they grew in size and complexity as new items were added and old subdivided.[4]

[1] *Parliamentary Debates*, CXVII, 1869, p. 834; 12th Report, Commissioners of Inland Revenue, 1869, pp. 11–12; 17th Report, 1874, p. 20; *Agricultural Returns of Great Britain, With Abstract Returns for the United Kingdom, British Possessions and Foreign Countries, 1881* (C3078), p. 3.

[2] Manor Farm, Upper Stondon, Bedfordshire Record Office, D.D.X., 159/3.

[3] *Agricultural Returns for Great Britain*, 1867 (C3941), p. 3; 1877 (C1878), p. 3; 1869 (C4200), p. 4; 1892 (C6743), p. vi. In practice in 1867 "cottagers and holders of small pieces of garden ground" were exempted.—Excise General Order, 29 May 1867.

[4] Returns were also compulsory from 1918 to 1921 under the provision of the Corn Production Act, 1917.

By 1919 the twenty-five items for which returns were required in 1866 had increased to fifty.

The difficulties encountered in the early experiments in the collection of statistics had concentrated efforts on the limited objective of securing the acreages of crops. Yet one of the chief arguments advanced in support of the collection of agricultural statistics was the light they would throw on the production of different crops, and Sir John Walsham had gone so far as to say that the acreage figures without yields were "interesting as statistical curiosities" but no more.[1] In 1884, when the collection of the acreage figures was firmly established, an attempt was made to obtain information about the yields of certain crops—wheat, barley, oats, beans, peas, turnips, mangolds, potatoes, and hay. Estimators were appointed, generally men experienced in making agricultural valuations. They were given groups of approximately fifty parishes, and required to make estimates of the yields of these crops in each parish, though parishes might be grouped where soils and the quality of the crop varied only slightly.[2] These estimates have also continued to be made, though the procedure has been somewhat modified. Their historical interest is, however, less both because they are estimates, and because the smallest area for which they are available in England and Wales is the county;[3] for the study of regional change in agriculture, the livestock and acreage figures are of much greater importance.

INFLUENCE OF THE PREVIOUS EXPERIMENTS

The final form which the returns took and the way in which they were collected were clearly influenced by the experiments of the preceding thirty years. After 1836 a trend towards simpler returns is noticeable, and the difficulties of ascertaining yields, of collecting numbers of different classes of livestock, and of determining the extent of rough unenclosed land used for grazing, led to concentration on the collection of crop acreages; for the collection of livestock numbers in 1866 was purely fortuitous. Other lessons could certainly have been learnt, for many of the problems which the Board of Trade was to face in the collection of the returns had been met and noted, if not solved, on previous occasions; the problem of complete enumeration, the unreliability of the Rate Books, the use of local measures, ignorance of the true extent of land held, and difficulties of definition, particularly of per-

[1] Lord's Committee, evidence of Sir John Walsham, Question 174.

[2] Circular to Collectors, 28 July 1884. Details are also to be found in *Agricultural Produce Statistics, Great Britain*, 1884 (C4216), pp. 5–7, and *Agricultural Produce Statistics of Great Britain*, 1890 (C6298), p. vii.

[3] Produce returns are available for Scotland by parishes from 1884 to 1911.

manent grass and fallow, had all caused trouble before.[1] At first sight it is difficult to see why the standards of accuracy which were acceptable in 1866 did not prove satisfactory in 1854. It may be that the success of the livestock census of March 1866, taken during an emergency for motives which were clearly in the farmers' interests, encouraged an attitude of optimism which minimized the shortcomings of the acreage returns. Some credit is also due to the new machinery for collection that was adopted in 1866, for though the Excise Officers were not agriculturalists, and though they were acting only as agents of the Board of Trade, they were paid officials of the central government and did not refuse to collect returns, as did the Boards of Guardians.[2] Furthermore precautions had been taken to secure estimates in default of returns, so that statistics of a kind were obtained from all known occupiers, and not only from those who could be persuaded to fill in a schedule or give the details of their holdings to the Collecting Officer.[3] For these reasons, and because the returns were uniform for the whole country, the 1866 returns are probably more accurate and complete than their predecessors.

[1] *Agricultural Statistics of Scotland*, 1854, *loc. cit.*, pp. 3–5; 1855, p. 3; 1856, p. 5; also Lords' Committee, evidence of Hall Maxwell, Question 59; and *Reports of Poor Law Inspectors*, pp. 75, 76, 79.

[2] Some difficulties did arise later. See Minute of Board of Inland Revenue, 23 June 1892, as to proposed refusal to collect Agricultural Statistics. Excise officers continued to collect the returns until 1919.

[3] In 1854 specific instructions were given that estimates should be made where no return could be obtained (*Reports of Poor Law Inspectors*, p. 18), though no procedure seems to have been laid down; in general, however, estimates were not made, and the returns prior to 1866 are therefore less complete.

(*To be continued*)

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A Review of Balks as Strip Boundaries in the Open Fields

By H. A. BEECHAM

IT was Seebohm who first alleged that individual holdings—strips or parcels—in the Open Fields of medieval England were bounded by green balks of unploughed turf.[1] This statement was accepted and copied by many later historians until the publication of the Orwins' *Open Fields* in 1938. The Orwins, in this and the subsequent edition published in 1954, disputed Seebohm's general statement on the grounds that he had misinterpreted his evidence.[2] They argued that any purpose balks might have had was already served by a boundary of a different sort. The action of the fixed mouldboard plough was to form lands (ridges, beds, warps, stitches, etc.) and between each land was a clearly demarcated furrow. Each man knew how many lands went to his strip and the furrow showed where each land joined the one adjacent to it. Balks would have been pointless and wasteful; and it is difficult to conceive such a wastage of land at a time when the cultivated area in each parish was barely sufficient to support the needs of the community.

Two further points made by the Orwins are as follows. ". . . A common complaint in the proceedings in the manorial courts is that against the man who encroached upon his neighbour's strip, which could not have happened if there were an intervening balk." Furthermore, "the compilers of the Book of Common Prayer thought it desirable to repeat the condemnation by the law of Moses of those who removed their neighbour's landmarks. Clearly such were not balks." As evidence the Orwins cite a picture which hangs in Averham Park, near Newark. Painted in 1720, it portrays the house in which it hangs, with a foreground of tillage field. This field is most clearly represented with its lands thrown up under crop, but the lands are divided only by wide furrows.

A further piece of negative evidence in support of the Orwins' case is to be found in Welbeck Abbey in the form of a portrait painted in 1716 by John Wootton. This portrait shows Lady Henrietta Harley hunting the hare on Orwell Hill, near Wimpole in Cambridgeshire, across a landscape of open-field country. Ridge and furrow are plainly shown, but there is no sign of balks. There is also a significant silence on the part of the protagonists of

[1] F. Seebohm, *The English Village Community*, London, 1883, pp. 2–3.
[2] C. S. and C. S. Orwin, *The Open Fields*, Oxford, 1954, pp. 43 and 44.

enclosure.[1] Arthur Young and his contemporary pamphleteers criticized the open-field system and urged its abolition, yet not one can be found who pointed to balks between strips as wasting land and harbouring weeds: this criticism was left to the text-book copyists of Seebohm.

Finally, there are, throughout the country, acres of grassland where open fields are known to have existed. Both ridge and furrow are plainly visible, but no trace of balks can be found. Had balks existed when these ploughlands were laid down to grass, traces of them would survive: whereas all we can find is land after land alternating solely with furrow.

The controversy has however revived in recent years and new evidence of balks as strip boundaries is alleged to have been found. Before proceeding to estimate the validity of this evidence, it will be as well to consider certain factors and assumptions which, in the present state of knowledge, are basic to the controversy. The first important factor to be recognized is the existence in the open-field system of various unploughed pieces of land, often called balks or meres, which neither ran between strips nor were they the boundaries of strips. At least four such distinct types of balk were found by the Orwins at Laxton.[2] There were, first, the paths by which a farmer could approach his land without crossing those of his neighbour. These were sometimes called common balks or footbalks, and they are to be seen clearly marked in many pre-enclosure estate maps. Canon Scobell shows clearly the meaning of the term common balk in the following quotation from a homily. "It is lamentable to see in some places how greedy men use to plough up and grate upon their neighbour's land that lieth next them; how covetous men now-a-days plough up so nigh the common balks and walks which good men aforetime made the greater and broader, partly for the commodious walk of his neighbour, partly for the better shack in harvest time, to the more comfort of his poor neighbour's cattle. It is a shame to behold the insatiableness of some covetous persons in their doings; that where their

[1] For mention of such balks in the light-soil counties alone, the following reports may be searched in vain: W. Marshall, *Rural Economy of Yorkshire*, London, 1788; *Rural Economy of Gloucestershire*, 1789; *Rural Economy of the Midland Counties*, 1790; *Rural Economy of Norfolk*, 2nd ed., London, 1795; Thomas Brown, *General View of the Agriculture of the County of Derby*, London, 1794; John Monk, *General View of the Agriculture of the County of Leicester*, London, 1794; Thomas Stone, *General View of the Agriculture of the County of Lincoln*, London, 1794; Robert Lowe, *General View of the Agriculture of the County of Nottingham*, London, 1794; Nathaniel Kent, *General View of the Agriculture of the County of Norfolk*, London, 1794; Arthur Young, *General View of the Agriculture of the County of Sussex*, London, 1793; *General View of the Agriculture of the County of Suffolk*, London, 1794; William, Jacob, and James Malcolm, *General View of the Agriculture of the County of Surrey*, London, 1794; John Boys, *General View of the Agriculture of the County of Kent*, London, 1796.

[2] Orwin, *op. cit.*, pp. 47, 48, 99.

ancestors left of their land a broad and sufficient bier-balk to carry the corpse to the Christian sepulture, how men pinch at such bier-balks; and now they either quite ear them up or turn the dead bodies to be borne farther about in the high streets; or else, if they leave any such meer, it is too strait for two to walk on."[1]

Then, secondly, the headland of the furlong, that margin at the top and bottom of the lands where the ploughs and their teams had room to turn, was sometimes called a balk; although as a rule, the headlands would be cultivated each year after their use as a turning ground was over.

Next, in many an open field there would be awkward corners, steep banks, or low-lying wet places which would be unsuitable for cultivation. These were left as unploughed balks, and, in Laxton and elsewhere, were known as 'sikes'.

The fourth type of balk noted by the Orwins at Laxton was the half-balk or 'stintin'. This was an arrangement necessitated when the "lands of one furlong abut direct on to those of another, or they finish at right angles to the outside land of the next furlong, without the intervention of any common balk or headland."[2] Here either cultivator had the right to tread 2½ yards on to his neighbour's land in order to cultivate, manure, and harvest his own. When the lands met end to end this margin of 2½ yards was known at Laxton in the seventeenth century as a half-balk. It is known today as a 'stintin'. Like the headlands, these half-balks were, after use for purposes of access, cultivated, sown, and harvested with the rest.

Paths and headlands would of course constitute boundaries to the furlongs themselves, and it is presumably such balks that J. A. Venn describes as "... the numerous balks which would have obtruded themselves, between the furlongs in the arable field at, say, Rampton ..."[3] Parish roads, common balks, and sikes would serve as boundaries to the two or three huge fields themselves. Moreover, the 1840 Tithe Map of the then unenclosed parish of Easington, Oxfordshire, shows a tract of land 2 r. 12 p. in extent, called in the Award a "balk," and under "common cultivation," which served as a boundary between this parish and that of Chalgrove.[4] It is important that the existence of such balks in the open fields should be recognized and acknowledged. Their existence is recorded in manorial documents. If it is forgotten, and if, to the unwary historian, 'balks' mean only strip boundaries,

[1] 'The Common Fields at Upton St Leonards and the Recent Enclosure', *Cotteswold Naturalists' Field Club*, XIII, pt. III, 1900, p. 219.

[2] Orwin, *op. cit.*, p. 99.

[3] J. A. Venn, *Foundations of Agricultural Economics*, Cambridge, 1933, p. 44.

[4] Bodleian Library, Oxford.

a most confused interpretation of such documentary references may well result.

In a wider context than that of open-field farming, the balk or mere is of course as recognized a form of field boundary as is the hedge, ditch, wall, or fence. In many arable areas, provided stock does not have to be kept in (or out) and provided that the protective shelter of the higher form of boundary is not required, these balks serve a very useful purpose. Their maintenance cost, for one thing, compared with other forms, is negligible.[1] This being the case, balks found as field boundaries today can scarcely indicate (as Venn seems to have thought) that they are derived from strip boundaries of the pre-enclosure period.[2] Additional evidence would be required to support such a view. In some areas balks have, as field boundaries, a practical utility which is sufficient explanation of their existence without resort to an unsubstantiated medieval ancestry.

The issue is further complicated by certain farming practices now rendered obsolete and for the most part forgotten. The first of these was noted by the Orwins as having misled some writers, including Venn.[3] This was the practice "once pursued on some of the surface clay-land in England which has long since gone out of cultivation, of leaving a wide strip between each of the narrow 'lands' unploughed to facilitate more efficient drainage. . . Examples of these 'green furrows' as they are called, may be found on the lias clay south of Stratford-on-Avon, but they were not divisions between different tenancies. This land was so wet and impervious that it could only be tilled at all by ploughing it up in little dry and narrow 'lands', with a wide space between each into which the water could drain and where, in flat parts, it could lie."[4] Such unsuitable land would have dropped out of cultivation with the vanished need to be self-supporting, in respect of corn, both on the parochial and on the national scale. Moreover, the introduction of the underground drainage system in the nineteenth century would render such practices obsolete. But the photograph which the Orwins publish shows traces of these green furrows (or 'fithers' as they were called) at Crimscote in Warwickshire between lands now covered in turf; and it is not surprising to find that this practice bore the recorded sanction of manorial custom. It may of course be urged that the Orwins were wrong in their interpretation of this

[1] See Appendix, Glos., Westcote.

[2] ". . . anyone desiring to see balks in abundance need only traverse the Southern parts of Cambridgeshire or the North-Eastern quarter of Hertfordshire where, although enclosure has technically and legally overrun the country, yet physically it is non-existent, and the place of the hedgerows, and boundaries between individual fields, is still supplied by these earthen ridges."—Venn, *op. cit.*, p. 44.

[3] *Ibid.*, Plate I, opp. p. 32. [4] Orwin, *op. cit.*, p. 46.

phenomenon and of the photograph, and that we are looking, in fact, at the remains of balks between strips. But these green furrows, as can be seen, plainly occur between lands, and to identify them as strip boundaries would be to identify strip and land—an error to which later reference will be made. Furthermore, as will be seen below, the manorial court orders enjoined that the green furrows should be left between every land—not between parcels of land nor between the outside lands of individual holdings.

Two further practices may be remarked on, which, although their extent is unknown, might in their surviving traces be misleading. The Rev. St John Priest recommended that, as a method of levelling ridges, "small lands or ridges about two yards and a half wide should be formed in what are now furrows, as several farms have done in such instances, so that between the broad ridges there lies a small ridge, forming two furrows instead of one between the broad ridges."[1] Adam Murray recommended Warwickshire farmers to adopt a method which he had observed near Perth for reducing and levelling broad high-gathered ridges. The farmer, whom he had observed practising this method, "began with throwing a drain into every furrow, thus designing by one operation to dry the ground, to equalize the soil, and to give it a fallow. When these operations were completed, he gathered up a small ridge into the furrows above the drains to protect them from the surface water."[2] Either of these practices, although undertaken perhaps in comparatively modern times, might well leave traces discoverable to the eye, to the aerial camera, and to the excavator, which might appear to be evidence of boundary balks between strips.

The recently revived controversy would appear to involve two fallacies. The first of these is the land-strip identification which, as will be seen below, appears to have led Dr Kerridge to see the green furrows between lands on heavy soil as balks dividing strips. It should perhaps be pointed out that the term 'strip' is an invention of historians. It is not to be found in documents, and there is no evidence that it was known to, or used by, the open-field farmers. The word 'land', on the other hand, is not only commonly found in documents relating to the open-field system, but is in current use today among farmers by whom its meaning is clearly understood. 'Strip' is, however, a convenient term to use for the holdings scattered throughout the open fields, and its meaning is for the most part understood.

The classical view was that each man's strip approximated to as much land as he could plough in a day.[3] This was the customary acre, varying in size

[1] *General View of the Agriculture of Buckingham*, London, 1810, p. 130.
[2] *General View of the Agriculture of the County of Warwick*, London, 1815, pp. 140, 141.
[3] Seebohm, *op. cit.*, pp. 124 ff.

according to locality, but smaller on the whole than the statutory acre. The size of lands, however, varied very greatly, depending upon the nature of the soil and upon local contour.[1] On wet, heavy soils lands would be narrow, with frequent water furrows: on lighter soils they would be wider. On heavy soils they would be high: on drier soils relatively flat. As to length, on flat land they might run the full 'furrow-long' of 220 yards; but in undulating country with a changing contour they would be necessarily short. The Orwins found at Laxton that "the strips, or parcels, as shown upon the map (1624) were composed of one, two, three, or of many lands."[2] But Laxton was not exceptional in this respect. A deed of sale relating to Upton St Leonards, Gloucestershire, in 1624, shows that the number of lands which strips contained varied greatly, as did the size of the lands themselves.[3] The sale was of 21 strips in all. The smallest of these was only ¼ acre, consisting of three 'short acres', and the largest was 2¼ acres in extent: the average size of the strip 1⅛ acres. The smallest lands, or ridges as they were called here, are shown in a holding of fourteen of them measuring only 2 acres: the largest in a strip of two ridges measuring 1 acre. The size of the lands varied, therefore, on an average from ⅛ to ½ acre. The number of lands to a strip varied from "1 ridge in Rousemore's feelde, 1 forehead in same (½a)," to "14 ridges in Northill fielde (2a) called Woodcoke's peeces." Countless examples of the plurality of lands to strips can be found, but nevertheless, the erroneous identification of land with strip is still occurring.[4]

The second fallacy seems to have resulted from some confused endowment of the fixed mouldboard plough with the properties of the one-way plough, or else from ignorance of the former and of its workings. With the

[1] The introduction of underground drains, running across the fields, modified this variety, but not to the extent that might be imagined. On some of the heavy clay land of Warwickshire, with the ploughing campaign of the early war years, the narrow high-backed lands were widened, and thus, to a certain degree, obliterated by wider lands of a more convenient shape for tractor ploughing. In the space of a few years, however, the old high-backs were restored since they were found essential for drainage. For this information I am indebted to Mr A. Beecham, Compton Scorpion Manor, Warwickshire.

[2] Orwin, *op. cit.*, p. 101. [3] Glos. R.O./D127/921.

[4] Initiated perhaps by G. M. Trevelyan. "The outline of many of these 'strips', ploughed by the farmers of Saxon, mediaeval, and Tudor-Stuart times can still clearly be seen. The 'ridge and furrow' of pasture fields that once were arable is one of the commonest features of the English landscape today. . . . Often, though not always, the curved 'ridge' or 'land', thus clearly visible today, represents a 'strip' that was held and worked long ago by a peasant farmer, who also held and worked many other strips in other parts of the 'open field.' "—*English Social History*, London, 1944, p. 4; and expressed with far less guarded emphasis by M. W. Beresford in 'Ridge and Furrow and the Open Fields', *Economic History Review*, Second Ser., 1, 1948–9, pp. 34–45.

one-way plough, it is true, a field can be ploughed up and down, from one side to the other, without the necessity to create lands divided by furrows. It can be argued, therefore, that where the one-way plough was used upon the open fields, and furrows were not needed for drainage purposes, some other form of strip demarcation might be necessary and that balks might in such areas be the substitute.[1] The one-way plough, common to Kent, by a long tradition, has recently been discovered to be of greater antiquity than was previously thought. Mr F. G. Payne has identified it as being that portrayed in the tenth-century Cottonian MSS., Tiberius B.v. and Julius A.v.[2] Whether, however, it was used in this country at such an early date and whether it was *ever* used outside a few, small, limited localities has yet to be proved. For, as Mr Payne remarks, "It is the origin of these pictures that is open to doubt."[3]

The one-way plough was, of course, adopted wherever steam ploughing was introduced in the second half of the last century. When the steam engine was discarded, the one-way plough gave place once more to the fixed mouldboard plough—and this preference, running on into comparatively recent times, is perhaps significant. Compared with the fixed mouldboard plough, it is structurally weak and less able to withstand the strains of heavy soil. Generally speaking, on flat land furrows, and therefore the fixed mouldboard plough, were needed for drainage. In hilly country, the one-way plough, together with the temptation to plough always downhill, would result in soil erosion. The concept of 'ploughing flat', as described above, is a perfectly valid one, but much more evidence must be forthcoming before it can be used to prove the existence of balks for strip-demarcation throughout a wide area of medieval open-field country.

The case for balks, however, in relation to 'ploughing flat' has ramifications considerably more obscure than the obvious connection between one-way ploughing and the absence of dividing furrows, as stated above. Having read or written of ridge and furrow, and having seen it covered with turf in high-back country, it seems difficult for some to see ridge and furrow at all under less spectacular conditions. The eye that can no longer see a narrow high-backed land can see no land at all. Perhaps the soil is under plough and gone is the revealing turf with its convenient shadows. The eye that can no longer see the shaded, dark green furrow can see no furrow at all, however clear-cut it may lie for the ploughman's eye. Further confusion appears to

[1] M. Nightingale, 'Ploughing and Field Shape', *Antiquity*, no. 105, March 1953, pp. 23–6.

[2] 'The Plough in Ancient Britain', *Archaeological Journal*, CIV, 1948, p. 103.

[3] Mr Nightingale, while making use of Mr Payne's interpretation of one of these pictures for the purposes of his argument, omits all reference to this, its doubtful authenticity.

have risen from the ambiguity of the term 'ridge' in the phrase 'ridge and furrow'. This term is sometimes used to mean lands and at other times to mean high-backed lands. In either sense, however, the furrow is indispensable and its meaning unambiguous. This fact is sometimes overlooked.

Hence Dr Kerridge makes the mistake of supposing that because in some places lands were kept low, and the level of the fields flat, somehow or other there were no lands, or, at any rate, there were no furrows.[1] Furrows were not needed for drainage purposes and so there were no furrows. As there were no furrows, there must have been balks. The following quotation will show that Dr Kerridge had not in mind the one-way plough which would, indeed, have resulted in an absence of furrows. "Ridging up the land was unknown in Chalk Wiltshire. . . In Northumberland, on dry lands, the ridges 'are quite flat, and alternately gathered and split'. In Hampshire, and Wessex generally, 'throughout this whole country we all plough the ground upon the flat, and thwart the furrows in stirrings.' In fine, 'in the Open Champion where the land is dry, they do not lay up their ridges as in other places.' It is precisely this sort of tillage that accounts for the presence of grass balks in the open fields of the chalk countries of England. Without water furrows, a grass balk was needed as a dividing line between land and land. Such grass balks obtained throughout the open fields of Chalk Wiltshire, and in all chalk countries generally. . ."[2] The mention of ridging, albeit the ridges were flat, means that the fixed mouldboard plough was in use, laying out the fields into lands. But because these lands were not high-backs and because the furrows between them were not needed for drainage, Dr Kerridge supposes that the furrows did not exist. This is his first fundamental mistake: his second is the more common one of identifying strip and land and of supposing that the demarcations between holdings must therefore lie between each land. Both errors are clearly stated in the sentence already quoted, "Without water furrows, a grass balk was needed as a dividing line between land and land."

Dr Kerridge's conclusions, and their erroneous foundation, were noted by the Orwins in the recent edition of their book.[3] Dr Kerridge, however, has since attempted to prove that balks were strip demarcations not only in the chalk-down country but also throughout the midland plain.[4] In the case of the first-named region he now wisely abandons any attempt to endow the fixed mouldboard plough with the properties of the one-way plough; and he

[1] 'Ridge and Furrow and Agrarian History', *Economic History Review*, Second Ser., IV, 1951.
[2] *Ibid.*, pp. 18 and 19. [3] Orwin, *op. cit.*, pp. 49 and 50.
[4] 'A Reconsideration of Some Former Husbandry Practices', *Agricultural History Review*, III, 1955, pp. 32–40.

no longer suggests that where water furrows were not needed for drainage purposes, no furrows existed. He proffers two different sorts of arguments. One proof is based on the existence of linchets. These he thinks were formed by plough cultivation, because he has read in G. Atwell's *Faithful Surveyor*, 1662, p. 90, an account of the way a road was built, by means of the plough, to run up a hill taking a spiral or zig-zag course.[1] It is difficult to see the relevance of this feat of road building, but how linchets were formed is apparently of no account. "Whether or not the terraces and steeps were cut or resulted from cultivation—and the two explanations are reconcilable—does not matter for this discussion."[2]

What does matter, apparently, is that Marshall, Cobbett, and Jethro Tull saw linchets under cultivation in their own time. The statements of these writers he supports by other evidence for the cultivation of linchets. "That the common field upon the 'walls' at Amesbury in the sixteenth and seventeenth centuries was such terraced cultivation can scarcely be doubted." His three MS. references supporting this statement cannot, however, be traced. "At Kensworth there were 'iij rodas iacentes super lez lynches super stokynghill'." This is a quotation of a fragment of a footnote in H. L. Gray's *English Field Systems*, p. 377. But the evidence of the footnote in its entirety, and the passage in the text to which it refers, seem to prove that the open field did not exist at this place. "At Clothall some of the linchet terraces were cultivated until recently." Dr Kerridge cites Venn as his authority for this statement, but here again the reference cannot be traced.[3] "Similar terracing is to be found on the sides of some of the hills in northern England and is well described in Dr Raistrick's book on Malham."[4] Dr Raistrick states, in his book, that the linchets were made by plough and by Anglian settlers, but he offers no new evidence, nor indeed evidence of any sort for this statement.

The statements of Marshall, Cobbett, and Jethro Tull, together with the evidence examined above, are supposed to prove, in some way not explained, that linchets, when they occurred, were an integral part of the open-field system. The steeps between the platforms of linchets must therefore have been balks between strips: so, after all, there were balks between the strips of the open fields. However, the fact that linchets are found under cultivation at any period of history means merely that farmers will take land, if they need it, as they find it and make the best of it.

Moreover, if, as the Orwins maintained, these linchets were formed by an agency other than the plough,[5] then their particular formation, that is to say the platforms with grass banks or steeps between them, can have no con-

[1] *Ibid.*, p. 34. [2] *Ibid.*, p. 35. [3] *Ibid.*, p. 35, n. 7. [4] *Ibid.*, p. 35, n. 8.
[5] Orwin, *op. cit.*, pp. 175–9.

nection with open-field farming, can throw no light on its system, and can offer no evidence as to the existence of balks between strips within that system. Far from not mattering, the origin of linchets—by what agency they were formed—is, in fact, vital to any use of them in an argument of this sort.

Next follows what may be described as a philological argument "... 'Landsherds', another variant of the provincial name for boundary balks, may be taken in evidence. Formerly, I contented myself with observing that the terms *linch*, *linchet*, *lincherd*, *landshere*, *mere*, *balk*, and *wall*, all had, in the chalk country, the same general meaning of boundary balks in the common fields, this being the meaning attached to some of them by John Worlidge." Here we are referred back to a footnote in Dr Kerridge's previous article.[1] In this earlier footnote we are told that Worlidge defined the word 'dool' as meaning "a green balk or mound between the Ploughed Lands in Common Fields." But an examination of Worlidge's definition shows that Dr Kerridge has misquoted him. Worlidge defined the word dool as "a great" (not green) "balk or mound between the Ploughed Lands in Common Fields," and this "great" mound suggests far more nearly a sike than a strip of land between two holdings. This argument of Dr Kerridge's illustrates the danger referred to above, of overlooking the many different types of balks to be found in the open fields, and consequently assuming that the mere appearance of the word landsherd, balk, or any equivalent term, can be taken alone as evidence that balks were strip boundaries.

Of the midland plain, Dr Kerridge states, "There were, in fact, boundary balks in the common fields here as elsewhere . . ."[2] For evidence, Dr Kerridge quotes J. Morton's *Natural History of Northants*, 1712, p. 14, and Marshall's *Review of the Reports to the Board of Agriculture from the Eastern Departments of England*, 1811, pp. 135 and 136, as describing green furrows of exactly the same sort, and in exactly the same soil conditions, as those described by the Orwins at Crimscote in Warwickshire. He next cites the Rev. St John Priest's *General View of the Agriculture of Buckinghamshire* as his authority for stating that "In Buckinghamshire, open-field ridges were 2 ft high and the sheep commoned on the balks between them." Dr Kerridge would, however, appear to have misread the passage, for although the ridges are described as being two feet above the level of the furrows between them, there is no statement to the effect that sheep were pastured on balks between the ridges. The writer, in fact, goes on to describe, on p. 137, the bad state of the furrows. "The next loss I shall mention is in the furrows, it is

[1] *Economic History Review*, 1951, p. 19, n. 8.
[2] *Agricultural History Review*, III, 1955, p. 37.

twofold: one caused by the great depth of the furrows below the crown of the ridges, and the other by their deviations from straight lines. In the former case the water stands so much in the furrows, that it not only destroys all vegetation in the corn and grasses intended to be cultivated, for two yards on each side of them, but encourages the growth of all sorts of weeds and rubbish." This description does not suggest that grazing would be possible between the ridges.

Moreover, Dr Kerridge states that "references to greensward balks dividing and bounding the properties and occupations lying dispersedly in the common fields of the plain countries are superabundant. Sometimes the grass boundary balks are distinguished from the ridgeways and slades by the designation 'narrow' or 'foot', alluding to their width. Frequently the balks, green meres, or green furrows are described as lying between neighbour and neighbour. In some townships these balks were one foot wide, in some eighteen inches, in some two feet, in some three or four. Sometimes they were wider between acres than between roods."[1] These assertions are supported by no argument or illustration. Dr Kerridge's evidence consists of two references to printed works and forty-four references to MSS. The validity of these references will now be examined.

Sir T. Lawson Tancred, the first authority cited, says: "The large fields are divided into furlongs or fourshotts, and these were subdivided into a large number of long narrow strips, of about 1 acre or ½ acre each, called 'lands'.—The lands were separated from each other laterally by balks."[2] This passage occurs in the introductory remarks, and no evidence to support it is offered, nor may any be found in the three Court Rolls which follow. The statement, with its erroneous identification of strips with lands, was possibly derived from Seebohm or from one of his followers.

The second authority cited is F. S. Colman, who in *A History of Barwick-in-Elmet*[3] notes among 'Paines' formerly levied in the Manor of Barwick and Scoles, "None shall plough away any part of their neighbour's lands or balk between neighbour and neighbour or between lords and tenants . . ." These balks may have been green furrows, headlands, or half-balks—most probably the latter. Had there existed in this manor boundary balks between strips it would not have been possible to plough away a neighbour's land, or necessary to forbid such procedure.

Before proceeding to an examination of the unpublished evidence, it

[1] *Ibid.*, p. 38.

[2] 'Three 17th-century Court Rolls of Aldborough', *Yorkshire Archaeological Journal*, XXXV, 1943, p. 202.

[3] Thoresby Soc., XVII, 1908, p. 127.

must be stated that the references to this are given in exactly the form in which they were given in Dr Kerridge's article.[1] Exception has been made, however, in cases where soil conditions seemed important. Here an elaboration of location has been attempted, chiefly by the addition of the name of the county concerned.

Of the forty-four MSS. referred to, one could not be found.[2] In three MSS. nothing could be found which seemed relevant to Dr Kerridge's statements.[3] In six, although balks (in one case "grass ends") are mentioned, there is nothing to show that these were not sikes, common ways, headlands, or stintins.[4] The last MS. cited states: "Item, that No person shall Mow or Stake any Foot-baulk on pain for each default 10." This is perhaps a case where Dr Kerridge has interpreted the word foot as indicating width, but equally the word may be interpreted as indicating purpose: in other words, this footbalk was a footpath. Common sense will reinforce this second interpretation if consideration is given to the practical difficulties involved in tethering (or staking) an animal to the confines of a piece of ground one foot wide!

Nine of Dr Kerridge's references make no mention of balks or meres but suggest that in some places there were green furrows between the lands. These were mown for hay, and where width permitted, were grazed by tethered animals. Both mowing and grazing were usually restricted according to the time of year.[5] The first three may be quoted as examples. Presentment "of John Wilkins for mowing of furrows after St James day contrary

[1] For transcription, and for help with transcription, of all relevant passages in the MSS. cited by Dr Kerridge, I am indebted to the following, and to their assistants: Mr P. A. King, Northants R.O.; Mr L. Fox, Shakespeare's Birthplace Library; Mr E. H. Sargeant, Worcs. R.O.; Mr P. G. Bates, Cambs. R.O.; Mr A. C. Wood, Warks. R.O.; Miss M. Gollancz, W.S.L., Staffs.; Miss A. J. Godber, Beds R.O.; Mr M. G. Rathbone, Wilts R.O.; Mr B. Ashton; and Miss J. Riddell.

[2] P.R.O., DL, RS, Ct. R., bdle 82, no. 1133, m. 29.

[3] Northants R.O., Montagu Coll. Misc. Ledger 145, p. 503; box 1346, box 20, no. 32, m. 16; WSL, Ct. R. Shenstone 12 Oct. 18 Chas. I.

[4] B.M., Add. MS. 36908, ff. 8, 15v; Add. R. 54166; P.R.O., DL, Ct. R. bdle 106, no. 1535, m. 6; RS, Exch., Q.R., Deps. by Comm. 26 Eliz., Trin. 8; SOA, Willoughby de Broke Coll., 1393a, Ct. Bk. Sowe 6 Apr. 8 Geo. I; Northants R.O., Montagu Coll., Misc. Ledger 129, Polebrook 7 Oct. 1727.

[5] B.M., Add. MS. 36875, f. 25, Whitchurch, Worcs.; SOA, Man. Docs. Ct. R. Alveston and Tiddington, Warks., 21 Oct. 9 Jas. I; Ct. R. Alveston and Tiddington, Warks., 11 Apr. 18 Chas. II; Ct. R. Whitchurch, Worcs., 12 Oct. 1711; Willoughby de Broke Coll. 703a, Extracts Ct. R. Barford, Warks., 30 Sept. 1 Jas I; 1194 Ct. R. Barford, Warks., 6 Apr. 11 Chas. I; Northants R.O., box 1352, box 36, no. 28, Ct. R. Caldecote, Hunts., 11 Dec. 5 Chas. I; Isham of Lamport Coll., 128, Ct. R. Lamport, Scaldewell, Northants, 30 Apr. 18 Eliz.; P.R.O., Ct. R., GS, bdle 207, no. 42, Lemyngton cum Lillyngton, Warks, 5 Apr. 2 Ed. VI.

to a former paine"; "Item. We payne that every man shall leave his forrow between land and land four foot and betwixt fether and fether two foot in payne to forfeit . . ."; and "No inhabitant within the said manour shall bait or tye any horse or beast in the furrows of any corn fields until the corn be first out . . . none shall be baited or tyed unless the stake be upon their own land or furrow until it be carried." These places are all, however, those in which the soil conditions are similar to Crimscote, Warks., where green furrows were for drainage.[1]

One document refers specifically to a mere, and five more to balks, which appear to have been green furrows because restrictions were placed on mowing or grazing them.[2] The last reference may be quoted as illustration of this point, although, perhaps, "the small balkes lyinge betwixt the grayne" may have been footpaths: "Item it is ordered and agreed upon that noe person or persons shall keepe or lead any Cowes or bullocks upon the small balkes lyinge betwixt the grayne in the fields of ffoxton aforesaid at any time from May day untill harvest bee home upon payne . . . Item it is ordered and agreed upon that none shall lead any horses upon the narrow balkes of the fields of this Towne untill harvest be home upon payne . . ." Once again, these balks are situated on heavy land where green furrows may well have been needed.

Without knowing exactly where in each manor the arable fields were situated, reference to soil conditions cannot be as precise as would be desired. The following table, however, shows the types of soil prevailing at the present settlement sites of the nine places for which similarity of soil conditions is claimed with that of Crimscote, Warwickshire. The superficial geology of the Chatteris area indicates that the settlement itself stands on a gravel capping, while the surrounding fields are based on rather heavy soils derived from Kimmeridge Clay and Boulder Clay.[3] For the other eight places no drift geology data are available at the present time.[4]

[1] Orwin, *op. cit.*, p. 46.

[2] SOA, Throckmorton Coll., Ct. R. Throckmorton, Worcs., 13 Oct. 1725; Leigh Coll., Ct. R. Ratley, Worcs., 20 Oct. 1602; Northants R.O., Daventry Coll. 533, Hellidon orders 20 Oct. 29 Chas. II; 20 Oct. 36 Chas. II; 540, Hellidon orders 16 Oct. 14 Chas. II, Hellidon, Northants; Cambs. R.O., L.64, Ct. R. Foxton with Wimbush and Chatteris, Cambs., 7 Dec. 1665.

[3] Cf. R. W. L. Melbourne, M.A., *The Land of Britain*, Pt. 71 (Isle of Ely), London, 1940, p. 268.

[4] For the geological data I am indebted to Prof. K. C. Edwards and to Dr C. A. M. King, and for their interpretation to Prof. E. G. Hallsworth.

Place	*County*	*Grid. Ref.*	*Solid Geology*
Whitchurch	Worcs.	42/215489	Keuper Marl near Lower Lias outcrop
Alveston &	Warks.	42/235565	Keuper Marl
Tiddington		42/222558	
Barford	,,	42/271608	,, ,,
Caldecote near	Hunts.	52/175785	Oxford Clay
Upton			
Scaldewell	Northants.	42/769726	Upper Lias Clay/Inferior Oolite
Leamington with	Warks.	42/316655	Keuper Marl
Lillington		42/324673	Keuper Marl
Throckmorton	Worcs.	32/981499	Lower Lias
Ratley	Warks.	42/382473	Mid. Lias (Marl stone)
Hellidon	Northants.	42/516582	Mid./Upper Lias
Chatteris	Cambs.	52/392860	Kimmeridge Clay

Where the settlements are marginal, exact knowledge of the location of the arable fields referred to in the documents is important. If the fields at Scaldewell were on Upper Lias Clay, then the need for green furrows was highly probable, but unlikely if they were based on Inferior Oolite. The Mid. Lias at Ratley makes the need probable; the type of soil at the other eight settlements makes it highly probable.

Thirteen more of the documents cited refer specifically to balks between lands, as distinct from furrows.[1] They have, however, a characteristic extremely damaging to Dr Kerridge's contention that they were boundary balks "dividing and bounding the properties and occupations lying dispersedly in the common fields." For in every MS. they are described as lying between *every* land in the field or fields. Since many properties and occupations must have consisted of more than one land, then these balks lying between *every* land cannot possibly have been boundary demarcations.

Thus of the forty-four references provided as evidence of boundary balks between strips, thirty-eight prove on examination to contain no evidence at all. Of the six remaining references, four will be considered when they are duplicated in a later context.[2] The other two will be considered now.

The first of these refers to a field book of the Manor of Passenham, Northants (26 Sept. 8 Eliz.).[3] In the East Field of this manor there were

[1] P.R.O., DL, RS, bdle 106, no. 1535, m. 1; m. 5; Chanc. Proc. ser. 1, Jas. I, bdle S. 29, no. 7, m. 1; SOA, Trevelyan Coll., Ct. R. Snitterfield 20 Oct. 1660; Northants R.O., Montagu Coll., Misc. Ledger 129, Weekley, 12 Oct. 1721; Luddington, 12 Oct. 1728; 145, p. 71; p. 157–8; p. 469; box 1336, box 7, no. 72, Ct. Bk Weekley 4 Oct. 1707; No. 66/10 Ct. R. 12 Oct. 1721; box 1342, box P, pt. 2, Ct. Files Dondon in Quainton, 10 Sept. 1700, field orders; Daventry Coll. 573a, Ravensthorpe agreement, 1721.

[2] P.R.O., DL., RS, bdle 106, no. 1534, m. 6; SOA, Throckmorton Coll., Ct. Bk. Stoneleigh, p. 23; Warks. R.O., MR. 14, copy Ct. R. Leamington Hastings, 25 Aug. 1630; MR. 16/9.

[3] P.R.O., DL, RS, bdle 8, no. 6a, p. 3.

90 strips of lands of which two were balked on both sides and seven more strips were balked on one side. No balks are described as being in the West Field. In the North Field, of a total of 112 strips, two were balked on both sides and ten strips were balked on one side only. A terrier of lands held by Richard Campion in South Luffenham in 1615 affords similar evidence of balked strips.[1] In the South Field of South Luffenham[2] Richard Campion held 33 strips of land of which four were balked on both sides and eleven were balked on one side. In the East Field he owned 42 strips of which one was balked on both sides and eight on one side only. In the West Field he owned 33 strips; one was balked on both sides, seven on one only. In both these MSS. it will be observed that a very few balks are described as occurring among a very great number of strips. In view of the various types of balks to be met with in the open fields of any district—footpaths, headlands, sikes, and so on—it would be surprising if these did not occur as important landmarks in terriers and similar documents. Such balks, of course, bounded the lands which lay adjacent to them, and therefore bounded the strips which contained these as their outside lands. These sorts of balks are to be seen in estate maps and it is not surprising that they are to be found in documents as well. But in both these documents mention of them occurs with insufficient frequency to justify the view that their main purpose was to demarcate the strips next to which they are described as lying.

Dr Kerridge goes on to say: "When a land had been a middle land, it did not have to be balked on each side, but after it was exchanged and had become an end land, it had to be balked on one side to provide a boundary between neighbour and neighbour." His evidence for this statement is taken from a deposition concerning the ownership of lands in Cotton End in Northamptonshire,[3] part of which reads as follows, "And at the same time two of the said lands had at every end two bawkes and the other being the middle land had no bawke since which time this middle land being exchanged by one Thomas Ayle with the said George Ravenscroft was marked with bawkes as the others are . . ." But surely only a very hurried reading could suggest that the balks mentioned were running lengthwise *between* the lands. The writer states clearly that the two outside lands had balks at *each end*: that is to say, they were headlands or stintins. If the writer had meant sides when he said ends, then the two outside lands would have had balks running down both

[1] Leics. R.O., Linden Hall MS. 343.

[2] See Appendix, Rutland, South Luffenham.

[3] *Art. cit.*, p. 38, n. 3, P.R.O., Exch. Q.R., Deps. by Comm. 26 Eliz., Trin. 8, dep. by Wm. Harrowden.

of their sides. If this had been the case, the effect must have been, inevitably, to give the middle land balks down its sides too. This is, however, contrary to what the writer explicitly states.

Dr Kerridge next states: "There is, however, abundant evidence that it was forbidden by customary law to plough up the boundary balks during any year of the field course, especially and specifically where the lands were not middle but end lands and the balks were boundaries between neighbour and neighbour." This assertion is supported by no argument or illustration other than a footnote containing references: one to the printed work by F. S. Colman which has already been discussed, and thirty-two to MSS.[1] The validity of these MSS. references will now be examined.

One MS. could not be traced.[2] In three instances no mention whatsoever could be found in the MSS. of the ploughing up of balks, let alone of the ploughing up of those bounding end lands or between neighbour and neighbour.[3] In fifteen cases the ploughing up of balks is forbidden but the type of balk is not specified as being either between land or between strip.[4] Some of these fifteen documents, indeed, indicate fairly plainly what type of balk was in question. For instance, in the Tempsford Court Roll of 1617, "Item it is ordered anew that noe man shall eare or plough up any Baulkes or Common Headons being atte theire Lands ends further than in former and ancyent tyme it usually hath beene upon payne . . ." Here the phrase "being atte theire lands ends" which qualifies both Baulkes and Common Headons, suggests stintins. Or possibly "Baulkes" is being used as synonymous with "Common Headons" (or headlands). And in the Stivichall Court Roll of 3 Oct. 1724 we find: "Ordered that no one shall plough half Balks between their land and the land adjoining on payne of 10-0." This half balk was, it may be assumed, a stintin where the two lots of land met without the intervening headland.

In five cases, the ploughing up of green furrows was forbidden, although

[1] *Art. cit.*, p. 39, n. 2.

[2] Northants R.O., Montagu Coll., box 1352, box 18, no. 160, Barnwell orders 1 Dec. 1614.

[3] Leics. R.O., box 311, Leire arts. of agreement 1689; Northants R.O., Montagu Coll., box 1342, box P, pt. 2, Ct. Files Dondon in Quainton 10 Sept. 1700; SOA, Man. Docs., Ct. Files Whitchurch, pains and orders, 24 Apr. 1588.

[4] B.M., Add. MS. 36908, f.3v; Beds. R.O. DD/TW 10/2/9, Ct. R. Clapham 14 Apr. 8 Chas. I; BS. 1276, Ct. R. Tempsford 1617; L. 26/563, Ct. R. Harrold 2 May 9 Chas I; Northants R.O., Westmorland Coll., box 7, no. 71, Yarwell presentmt. bk. f.5; Finch-Hatton Coll. 834, Gretton bye-laws 24 Oct. 1695; 991, Ct. R. Weldon Magna 1728; Ecton Coll. 20, Ct. R. 9 Oct. 1713; 7a, Ct. R. 1 May 1701; 9, Ct. R. 14 Oct. 1743; Daventry Coll. 573c, Ravensthorpe agreement 1760; Montagu Coll., Misc. Ledger 145, p. 236; Higham Ferrers Burgess R. 1696–1725, field orders, 23 Apr. 1719; SOA, Willoughby de Broke Coll. 1393a, Ct. Bk. Sowe 6 Apr. 8 Geo. I; Hood Coll., Ct. R. Stivichall 3 Oct. 1724.

the MSS. contain nothing to connect the furrows with lands which were not middle but end lands, or to suggest that the furrows were boundaries between neighbour and neighbour.[1] The last of these may be quoted. "Item that no man shall kare up his furrows and hades but shall leave them sufficient at the discretion of the overseers viz. three yards on a side at the hades and three foot broad the furrow." The three townships referred to—Alveston and Tiddington together with Whitchurch—are on Keuper Marl, and Luddington is on Boulder Clay. On both types of soil green furrows were probably a necessity.

Six references alone among the odd thirty support Dr Kerridge's statement that it was forbidden to plough balks specifically where these occurred between neighbours.[2] The relevant passages in these six MSS. read as follows. "It is agreed that there shall be no baulkes plowed betwixt Neighbour & Neighbour" (Thurlaston, Warks., 1719); "They do agree and do amerce William Dowler . . . for ploughing away part of a meare betwixt the land of Richard Thornton and the said William Dowler" (Kempsey, Worcs., 1656); "Item that everye of the inha'itantes of Shenston that have plowed upp, any of the balkes in the fieldes betwixt theires and theire neighbours landes, that before the feast daye of St. John Baptist next cominge they and everie of them soe offendinge doe laye the same downe againe and soe suffer the same to lye as formerlye" (Shenstone, Staffs., 1633); "We present Tho: Clarke for plowing away a balke between Thomas Pytchley and himself at Larkshill" (Hellidon, Northants, 1714); "It is ordered and agreed that noe landholder shall plow any greensward from any balkes that lye betweene landes and lands" (Hellidon, Northants, 1677); and "The Jurors aforesaid Do upon their oath present John Hudson for ploughing up a Baulk which lay betwixt him and Widow Garlick . . ." (Stoneleigh, Warks., 1742).

Two further of the MSS. cited may be quoted, since, although these do not support Dr Kerridge's statement that it was forbidden to plough up balks between neighbour and neighbour, they are not without bearing on his case. "It is agreed that there shall be balks layd down in Blackfern field for every acre the balke two foot wide for three roods a foot and half and for two roods a foot" (Urchester, Northants, 1711)[3]; and "Item. That every inhabitant in the parish of Leamington Hastings shall make and keep a

[1] BM. Add. R. 44654, Ct. Whitchurch, 7 May 1740; Northants R.O., Montagu Coll. Misc. Ledger, 145, p. 451, Luddington; SOA, Man. Docs., Ct. Files Whitchurch, 12 Oct. 1711; Ct. R. Alveston and Tiddington, 11 Apr. 18 Chas. II; Ct. Bk. 20 Apr. 2 Jas. I.

[2] Warks. R.O., MR. 16/9; Worcs. R.O. Acc. 54, Ct. R. Kempsey, 31 Mar. 1656; WSL, Ct. R. Shenstone, 1 May 9 Chas. I; Northants R.O., Daventry Coll. 532, Hellidon orders, 13 Nov. 1714; 533, do. 20 Oct. 29 Chas. II; SOA, Ct. Bk. Stoneleigh, p. 23.

[3] P.R.O., Ct. R., SR, bdle 106, no. 1534, m. 6.

sufficient mound betwixt neighbour and neighbour" (Leamington Hastings, Warks., 1630).[1]

These last eight references do not indicate, however, that the balks ploughed up were boundaries between strips, in the sense that they ran longwise between them. Of the Presentments, the following interpretation is equally possible: that they were stintins or half-balks where two furlongs met end to end, with the lands of one furlong abutting direct on to those of the other. The owner of each abutting land had to leave a customary margin unploughed for his neighbour to turn his team on. When the time came to plough these half-balks, one man ploughed too far into his neighbour's margin and was duly presented and fined at the manorial court in consequence.

It is the contention of this article that Dr Kerridge has failed to produce any satisfactory or conclusive evidence of the existence of balks as demarcations *between* strips in the open fields. Such of his evidence, in the form of footnote references, as has been examined, turns out to be in some cases untraceable, in others non-existent, and the rest susceptible of interpretation other than that suggested in his text. He has failed to prove that such demarcations, either in the chalk country or in the midland plain, existed as late as the seventeenth and eighteenth centuries. But even had he succeeded, it would be difficult to deduce that such boundaries were common in the Middle Ages. That, surely, is the important point, if we wish to know how the open fields worked at their zenith and not where they merely survived as a remnant.

Obviously there came a time in the history of every open-field parish when a comparatively static phase was reached. Signs that it had been reached would be found, for instance, in the abandonment of the practice of co-aration, in a certain degree of consolidation of strips, and in a change of the method by which land reclamation was effected. Instead of a third large field (in addition to the two already existing) being brought into cultivation, what was reclaimed from the waste was now held, on the margin of the open fields, in severalty. Where there had been much consolidation, there might be a desire to enclose: and this desire might be effected by the use of narrow balks which would at the same time preserve the rights of pasturage over the arable fields. For this reason, the dating of the appearance of balks, if such exist, between strips, is essential if we are to deduce anything relevant to the medieval strip-farming system.

The purpose of this article has been to determine the present position regarding balks as boundary demarcations, to stress the present state of ignorance of the subject and the pitfalls into which we may be led. A far

[1] Warks. R.O., MR. 14.

wider and more profound investigation could be made; and some indication of its extent is to be found in the Appendix. Here are listed a number of places for which evidence, varying in strength, of balks as strip boundaries may be found. In cases where a visit, or some examination of the evidence has been possible, these have been described. Where the information is sufficiently brief it has been quoted in full. Where considerably more has been written on the subject, references only are given.

The two most fruitful lines of investigation, for those who would attempt to establish the use of balks as strip boundaries, would appear to be as follows. Did the one-way plough ever hold sway to any extent in open-field country? If so, when and where? If evidence is forthcoming along these lines, is there any further evidence, in such localities, that balks existed between strips as distinct from all the other kinds of balks which existed in every open-field area? Secondly, there are certain areas where enclosure has never taken place, or incompletely so, and where balks dividing holdings in some sense exist or existed until recently. Did these balks themselves come into existence only recently, or at least in the modern period, as a result of consolidation, and as an attempt to satisfy the desire to enclose while respecting unalienated grazing rights; or are they, in fact, a survival of an ancient form of strip demarcation? The question 'when?' here is all-important. The answers will be found only by a patient and detailed study, such as the Orwins made of Laxton, of the localities in question—of their soil and contours, of their estate maps, terriers, and manorial records, and all other evidence printed, written, and unwritten.

APPENDIX

BEDFORDSHIRE

HINWICK. Orders for Hinwick (in court papers) 29 Oct. 1668. "That every person within the parish afforesaid shall leave a balke att the outsides of his lands betwixt man and man and the said balke to bee a foote and halfe wide under paine of 2s. 6d."—Beds. R.O. OR 809. I am indebted to Miss J. Godber for this reference.

BUCKINGHAMSHIRE

WENDON (*sic*, for WEEDON?). The following statement, made by William, James, and Jacob Malcolm in their *General View of the Agriculture of the County of Buckingham*, London, 1794, p. 29, is quoted by Gilbert Slater (*The English Peasantry and the Enclosure of the Common Fields*, London, 1907, pp. 75, 76) and cited by Dr Kerridge (*A.H.R.*, III, 1955, p. 40, n. 1). "About fourteen years ago the parishioners came to an agreement, and obtained an Act to lay the small pieces of land together. . . When division took place, the balks were of necessity ploughed up, by which a great proportion of the sheep pasture was destroyed." There is no indication that

these balks were strip boundaries. If they were, it is difficult to understand how sheep could be pastured on them. Of their extent, the writers go on to say "the wastes and balks in these common fields occupy a great space of ground, and yield but very little of any kind of produce."

CUMBERLAND

CASTLE CARROCK. Of this parish F. M. Eden, in his *State of the Poor*, London, 1797, II, p. 65, says that it "contains by estimation, 750 acres of cultivated land, 600 acres of cow common, and 1500 acres of mountainous common. . . The greatest part of this parish remains in dales, or doles, as they are called; which are slips of cultivated land belonging to different proprietors, separated from each other by ridges of grass-land: about 100 acres may have been enclosed within the last 50 years." Gilbert Slater quotes part of this passage (*op. cit.* p. 257) substituting, however, the word "strips" for "slips."

WARWICK ON EDEN. F. M. Eden (*ibid.*, p. 92) says: "It consists of 600 acres of common, and 1126 acres of cultivated land... There is a small common in the middle of the parish: almost the whole of the cultivated land has been enclosed within the last fifty years. It formerly, although divided, lay in long slips, or narrow dales, separated from each other by ranes, or narrow ridges of land, which are left unploughed. In this manner, a great deal, and perhaps the whole of the cultivated lands in Cumberland, was anciently disposed." Gilbert Slater quotes part of this passage (*ibid.*) substituting, again, "strips" for "slips."

DEVONSHIRE

BRAUNTON. See J. B. Phear, 'Notes on Braunton Great Field', *Trans. Devon. Ass.*, XXI, 1889, p. 202; H. P. R. Finberg, 'The Open Field in Devonshire', *Antiquity*, XXIII, no. 92, Dec. 1949, p. 180; W. G. Hoskins and H. P. R. Finberg, *Devonshire Studies*, London, 1952, pp. 265–71; Orwin, *op. cit.*, pp. 50, 51.

DORSET

GRIMSTON. Extract from Court Roll of the Manor of Grimston, 9 Oct. 1789. "It is agreed that the several tenants of this Manor do meet in the West Field within this Manor on the 14th inst., between 9 and 10 o'clock in the morning, to bound out the several Lands. And after the same shall be so bounded out it is ordered that each Tenant leave a Lanchett of a furrow between his and the adjoining land, under a penalty of 20s. for making a default." See Alfred Pope, 'Some Ancient Customs of the Manors of Stratton and Grimston, Co. Dorset', *Proc. Dorset Nat. Hist. and Ant. Field Club*, XXX, 1909, p. 94.

ISLE OF PORTLAND. See C. D. Drew, 'The Open Arable Fields at Portland and Elsewhere', *Antiquity*, XXII, no. 86, June 1948, p. 79; R. Douch, 'Customs and Traditions of the Isle of Portland', *Antiquity*, XXIII, no. 91, Sept. 1949, p. 14; Orwin, *op. cit.*, p. 50.

GLOUCESTERSHIRE

UPTON ST LEONARDS. Gilbert Slater, in his notes on *Some Recent Enclosures* (*op. cit.*, p. 63), says of this parish: "This enclosure took place at the same time as that of Castor and Ailesworth, and was completed in 1899. The common field consisted of 1120 strips of arable land, total area 520 acres, and the 'balks' or 'meres' separating the strips were estimated at 14 acres." The date of enclosure was in fact 1895, the date of award or enrolment, 1897, and the acreage involved 516 acres. (W. E. Tate, 'Gloucestershire Enclosure Acts and Awards', *Trans. Bristol and Glos. Arch. Soc.*, LXIV, 1943, p. 63.) It will be seen that the balks constituted barely three per cent of the total acreage. This is a very small proportion if these balks consisted not only of paths, sikes, and possibly headlands, but also of unploughed land between the strips. At Laxton, where there were no balks between strips, "the sikes and other unploughed

ground amounted to about five per cent of the area of the common fields."—Orwin, *op. cit.*, p. 58.

Slater does not say where he obtained his evidence for stating that there were balks between the strips, but it may have been from an article by Canon Scobell who, incidentally, derives some of his interpretations from Seebohm (*art. cit.*, p. 215). In this article Canon Scobell says, "The strips, which thus appear to have existed generally in this and other uninclosed parishes, were separated from each other not by hedges but by lengths of unploughed grass—called 'balks' or 'meers'. . ." With this article is published a photograph of a balk. Set into the ground, at the near end of the balk, is a meerstone, initialled 'N'. A complete and extended view of the balk is prevented by the figures of a lady and dog who are shown reclining at a distance of some three yards from the camera: further than these two figures, the balk cannot be seen. Mr Charles Green, commenting on this article, says, "The balks themselves have, in the intervening years, been ploughed out of existence as far as I can trace. Merestones, however, can still be found in this parish, in considerable numbers." ('Balks and the Open Field System', *Antiquity*, XXII, no. 88, Dec. 1948.) Although the following information is not given in his article, Mr Green has been so kind as to tell me that none of the merestones he was able to find dates from a period earlier than the eighteenth century: some date from the early, and others even from the late, nineteenth century.

The 1841 Tithe map of Upton St Leonards is of a scale: 3 chains to one inch (Glos. R.O./P3476/SD2/2). All strips and roads shown on it are numbered, and the numbers refer to a schedule. Unnumbered, however, are series of double dotted lines, with a very narrow space between—narrower than that indicating the roads. These appear through the fields where access balks would be expected: but double dotted lines such as these are not shown between the strips. Another map shows parts of the parish in 1780. This is a Survey of Certain Estates belonging to Benjamin Hyett Esquire (Glos. R.O./D.6), on the scale 12 chains to one inch, and shows headlands at the end of strips, but no balks between them. In view of the scale of these maps, however, narrow balks may well have existed without other indication than a single dotted line. Both stones and posts are shown in the Enclosure Award maps, and they are also found in what was part of the open fields (a part called Brimps Field) in the 1884 Ordnance Survey map.

WESTCOTE. On the main road from Burford to Stow-on-the-Wold, and almost equidistant between the two, occurs the parish of Westcote, consisting of two parts, Church Westcote and Nether Westcote. This parish is on the Oxfordshire-Gloucestershire border, its solid geology is Inferior Oolite, and it is situated almost at the junction of stonewall country with that of fences. It has never been enclosed. On the left-hand side of this road may be seen rectangular fields some 30 to 40 yards wide, divided by balks of about the width of one yard. Of this land the Orwins say, "Much of it is divided by grass balks, but most of the parcels are large having the appearance of small fields rather than of strips, and they suggest that there has been a good deal of consolidation at some time, the balks taking the place of hedges and boundary marks."—*Op. cit.*, p. 46. On the other side of the road, however, between it and Church Westcote, are a number of considerably narrower strips—suggestively so. And the 1840 Tithe map shows that a century ago there were rather more of these narrow strips than exist today. One of the strip farmers (Mr Simmonds of Nether Westcote) provided the following information regarding the present position. The balks are called meres, they are "to part the land," and may be ploughed up between holdings when these are owned by the same man. He considered them most economical. They are kept as narrow as possible—2 to 3 feet—and are kept down by burning. Each mere belongs to the strip on the north side of it. Although never grazed, they were, within living memory, mown for hay. Only the fixed mouldboard plough is used, and this makes 'lands'—the strips themselves having each their special field name and no other generic term

to describe them. It would seem important that these balks should be dated, either by documentary or archaeological means. (For the difficulties inherent in the archaeological method, see Collin Bowen, M.A., 'The Problem of Roman Villa Fields', *The Archaeological News Letter*, VI, no. 2, 1955, p. 39.)

HAMPSHIRE

COMPTON. The following extract from a Court Roll, 1525, of Compton, is published by J. S. Drew in *Compton, near Winchester*, Winchester, 1939. "Lawrence Whytman has ploughed up a boundary, viz. a 'land-sherde', between the lord's land and that of Peter Fylpotte; he is ordered to keep it restored in future under pain of 40s."

NORFOLK

FORNCETT ST MARY. A visit to this parish last summer (1955) elicited that 'mere' balks dividing the lands had now gone. The previous owner (Mr Lincoln) of a ½-acre land said that the mere balks were boundaries, that they had proved useful as a pathway for the plough horses. He said that the fixed mouldboard plough was the only type used, and that with it lands were ploughed, known locally as 'beds'; also that there had been similar mere balks at Wacton.

CAISTER-ON-SEA. Mr Charles Green has described to me balks, in the form of small ridges between lands, under turf, which he noted while excavating the Roman site in 1951. The lands were parallel to the contours on a very slight slope.

HAPTON HOLE. My attention was directed to this district of Hapton, near Norwich, by Mr Charles Green, on the basis of information which he had obtained from Mr R. Rainbird Clarke, Curator of Castle Museum, Norwich. A visit to Hapton Hole last summer (1955) revealed a small field divided into three strips called 'londs' separated by mere balks consisting of grass and weed, and about a yard in width. These londs and their mere balks were not straight-sided rectangles but of the reversed-S shape, suggesting for the one, if not for the other, a certain antiquity. (See S. R. Eyre, 'The Curving Plough-strip and its Historical Implications', *A.H.R.*, III, 1955, pp. 90–4.) Another mere balk was said to exist in a neighbouring field, but this was not inspected.

RUNTON. This parish, near Cromer, is still unenclosed. Gilbert Slater said of it: "There is a tendency for adjoining strips of land to be let to one and the same farmer and he is allowed to plough down the balks, in Runton called *lawns* or *loons*, which separate them."—*Op. cit.*, p. 331. A visit to West Runton last summer (1955) and a few enquiries made on the spot elicited the following information. On one large arable field there are a few balks separating strips. These balks consist of grass, dock, and other weeds, and are supposed to be maintained to the width of one yard. They are called 'mire' balks, not lawns or loons. There used to be mire stones at the end of some of these. One is supposed to be still in position, although now in a hedge, but a rather cursory search for it proved unsuccessful. The strips, straight-edged rectangles, rather than the balks, are called 'londs' (to rhyme with 'ponds'), although the 'd' sometimes fails to be articulated. The londs vary in width: some are 10, some are 20 yards in width, some are an acre, some half an acre in extent. They are made with the fixed mouldboard plough into lands which are also, confusingly, known as 'londs'.

The practice now seems to be contrary to what Slater described, in that if adjoining strips (belonging to different owners) are let to one and the same farmer, he must not plough down the mires. They may disappear only as the strips are consolidated among owners themselves. Since this land has never been enclosed, common grazing rights remain: two flocks of sheep, one after the other, are entitled to graze over the stubble after the harvest has been lifted. There are, in fact, no flocks in Runton and no one knows now who are the commoners: but these

unalienated grazing rights have precluded the erecting of barriers such as hedges or fences. For the information regarding grazing rights I am indebted to Canon F. H. Matthews, rector of Runton, and for the rest to farm labourers, working in the field, to whom he kindly introduced me.

NOTTINGHAMSHIRE

NEWARK. See M. W. Barley, M.A., F.S.A., 'Documents Relating to the Manor and Soke of Newark-on-Trent', *Thoroton Society, Record Series*, XVI, Nottingham, 1956, Introduction, pp. xlvii–xlviii, and Survey of the Bishop's Demesne, pp. 46–53.

PEMBROKESHIRE

HAVERFORDWEST. H. L. Gray, in his *English Field Systems*, O.U.P., 1915, p. 174, quotes from a note prefixed to the survey of the royal lordship of Haverfordwest, made in 21 James I. "And wee holde it conveynient that for all exchaunges to be made of anie peeces of land betwixte the Tennantes for conveyniencie, that the same be made in writinge and presented at the next Courte to the Stewarde to be Recorded, and that Notwithstandinge the exchaunge the auncient landshares and meares betwixt the peeces be preserved."—Land Rev., M. B. 238, f. 37.

PERTHSHIRE (SOUTH)

H. L. Gray (*op. cit.*, p. 165) describing the system known as 'runrig' in southern Perthshire, quotes from James Robertson's *Southern Perth*, 1794, p. 65: "But in our times nothing can be more absurd, than to see two or three, or perhaps four men, yoking their horses together in one plough and having their ridges alternately in the same field, with a bank of unploughed land between them by way of boundary. . . The land is like a piece of striped cloth with banks full of weeds and ridges of corn in constant succession from one end of a field to the other."

RUTLANDSHIRE

NORTH AND SOUTH LUFFENHAM AND BARROWDEN. Gilbert Slater states (*op. cit.*, pp. 64, 65): "The first steps towards the enclosure of these three parishes were made immediately after the passing of the 1876 Act: the Enclosure Act was passed in 1878, and the awards were made in 1881 and 1882. Out of 5480 acres in the three parishes, 4800 were common-field arable, a heath claimed by Barrowden and South Luffenham occupied 390 acres, and much of the remainder was commonable meadow and pasture. . . The report of the Enclosure Commissioners says of Barrowden that the 1240 acres of arable land 'is divided in 2790 strips, some not more than 12 feet wide, each divided from its neighbour by a green balk, which is a nursery of weeds.' Old farmers, however, assured me that the balks were mostly gone before enclosure. Field reeves were elected, and they settled any dispute that arose in consequence of the absence of balks, and individual farmers quickly detected, by pacing across their strips, if a furrow had been appropriated by a neighbour."

WILTSHIRE

VALE OF WARMINSTER. The Rev. Canon Jackson, F.S.A., in his article 'The Vale of Warminster', *Wiltshire Archaeological Magazine*, XVII, 1878, p. 294, stated: "There is, in this country, and there used to be a great deal more, of what is called 'common field', *i.e.*, large tracts of unenclosed arable, held in 'severalty', not unlike our modern Poor Allotments—strips or pieces, held, either by different persons, or, may be, three or four, by one and the same person. The strips are marked off from one another, not by hedge or wall, but by a simple grass path, a foot or so wide, which they call 'balks' or 'meres'."

An Answer to Poverty in Sussex

1830–45

By A. C. TODD

THOUGH the founding of the Royal Agricultural Society in 1838 arose out of the acute and prolonged depression in farming, it might have occurred some years earlier on the disappearance in 1822 of the old Board of Agriculture. Faced with a refusal by the government of Lord Liverpool to provide any further funds for its maintenance, the President, Davies Gilbert, suggested that a new lease of life might be gained if the Board became a voluntary society, and membership was opened to the public through the payment of subscriptions and donations. The project failed, and the Board was dissolved, but the idea was not abandoned, and finally flowered as one of the many and varied efforts to break the deadlock of poverty and unemployment in agriculture.

The heavy burden of the poor rate, diminishing rents, uncultivated land, idle labour, and empty stomachs, leading to the violent and wanton destruction of property, were the outward symptoms of a *malaise* for which no one seemed to know the cure. William Gausden, coachman to Lord Charles Fitzroy, giving evidence about the reasons for rick-burning in Sussex in 1830, wrote down: "my Beliefe is this that the fiers were not spite to eny indiviead but to open the eyes of the NO Bileity in reagard of lost of the land for the want of imploy of the Labor in tilling it." The nobility were not blind to the blight which had settled on English agriculture, nor unaware of the real hardships of hunger and poverty, and the humiliations of poor law relief. Some of them, for instance, sensibly reacted to the suggestions advanced in 1801 and 1819 that one way of relieving distress among landless labourers would be to provide them with allotments. Imaginative landowners were prepared to experiment locally and on a limited scale on these lines. One of them was Mary Ann Gilbert of Eastbourne, the wife of Davies Gilbert, last President of the Board of Agriculture. Her private papers, kindly loaned by Major and Mrs Davies Gilbert of Herstmonceux, reveal the extent to which a private landowner was prepared to go to restore to the landless and workless labourer something of the independence which he had once enjoyed. Her work is an interesting pioneer effort to cope with the twin problems of poverty and unemployment by means of allotments.

Regarding compulsory relief as a degrading substitute for the spirit of "independent support," she had few illusions about the problem of poverty. On the one hand, the law of God and Nature said: "He that will not work, neither shall he eat"; on the other hand, the law of England said: "The industrious must maintain the families at the least of the most profligate and worthless." Parish relief she did not believe was any solution to this paradox. "I would rather see the Poor Rate sunk in the sea than employed as now to the misery and moral deterioration of my fellow creatures," she roundly declared. Like many other landowners of her time who saw good land going out of cultivation while labourers were required to be supported by an ever-increasing poor rate, she saw the answer to the problem of poverty in economic and moral terms, of land being made to produce its fruits, and of men being allowed to do honest work. She herself was prepared to demonstrate on her own land near Eastbourne that if the unemployed were provided with ground on which to grow their own food, the worst features of pauperism would disappear.

To break down a fixed conviction that the pauper was work-shy, she began a pilot scheme to cultivate waste land to the east of Beachy Head, which she calls "the beach." Dr Whately, Archbishop of Dublin, told her how he had tried to develop land in Ireland

as barren as a beach by transferring to it soil from meadowland. Describing his method to her he said: "I pared off the turf from part of a rich meadow, dug up a spit deep of the mould and laid it in a heap, then dug out the subsoil for about four feet more, which I carried to a barren hill, bringing from thence back carriage, the sand from the hill (as you would the shingle), with which I filled up the hole, then laid the top soil over, and replaced the turf. The meadow was of course rather better for the draining and the hill greatly enriched." Mrs Gilbert believed she could do the same by the double process of removing soil and clay from marshland, depositing them on "the beach" to the east of Beachy Head, and replacing them by flint pebbles taken from "the beach." If paupers were employed to do this work at fixed rates of pay, several objectives would be reached at the same time. Marshland would be drained, new land brought under cultivation, the Poor Rate of Eastbourne reduced, and proof found that paupers wanted to work.

By the beginning of November 1832 Mrs Gilbert was in a position to present to Whately an interim report on the progress of her scheme. Marshland had been purchased and part of "the beach" covered with its clay to a depth of three inches by twenty-seven paupers, who had worked at the rate of one rod per day. In spite of the dry summer of 1832, these paupers had produced a reasonable crop of potatoes, and seeing the possibilities of the scheme they were now anxious to hire at 3d. a rod or 40s. an acre as much of the beach as the parish were willing to fence off to keep away stray cattle, "who much relish the produce." In anticipation of this, a wall was built parallel to the coast road, and a gateway made fitted with the first iron gates seen in Sussex. As the labourer opened the gate his eye caught the warning: "Here waste not Time and you'll want not Food." It was claimed that 174 paupers, mostly married, were managing to support their families on this land, indignant that some of the local landowners seemed to prefer that they should receive 2d. a day as dole, while good land "in fine corn country" was going out of cultivation. Of these 174, 117 had punctually paid their second year's rent for twelve rods each and no one had forfeited his land for trespass. One man Mrs Gilbert had provided with a cart and horse, the cost of which he had paid off through the sale of his produce. Because of his good husbandry he had now been permitted to rent a further three acres on condition that he also maintained a brother. One old man of sixty-seven had done so well with crops of potatoes, turnips, and mangel-wurzel that he had quadrupled the quarter of an acre he had originally rented and was now building "shelters" for himself, his cow, and his pigs. But in spite of these results, the vestries were sceptical and uncooperative, maintaining that the physical gain would be offset by a moral loss, for the labourers would actually learn to become independent.

Whately suggested that more trials should be made and then the results submitted to the Poor Law Commissioners as a possible local solution to pauperism. Before this could be done, some definite answers would have to be found to questions which the Commissioners would be sure to ask. For instance, did the day's labour of one man per rod mean spreading the soil over "the beach," or did it include the digging of that soil from the marsh and filling up the hole again? How many average men and boys could, in a week, prepare an acre of untouched "beach" and bring it into a state fit for planting? Had seaweed been tried as manure, as in Cornwall? Could it be brought in boats from Beachy Head? Could *beta maritima* be grown as cattle food? What was the best kind of hedge? Whately recommended sea buckthorn, or better still furze ditches made by digging two ditches with a mound between, on which was planted the furze, reinforced with tamarisk, as in Cornwall.

Mrs Gilbert reckoned that the cost of bringing one acre of beach into a state fit for cultivation was £16, but an Assistant Poor Law Commissioner who inspected the site put it at not less than £130. An independent assessor, one Pitman, reckoned it at £30, but

Whately advised her to proceed even if it cost £50, because it would be "a profitable speculation if the land be let at £2 since that would be 4 per cent on the outlay which is more than one can get in the Funds."

Whately was anxious that she should begin a long-term experiment, not with a view to the immediate benefit of neighbouring labourers, but by taking labourers from anywhere, to ascertain how much work a man could do per day. But this did not appeal to her. What she felt was needed was immediate relief to the labourer and a reduction of the poor rate. Through persistent pressure on the Eastbourne vestry, by bringing before them her own evidence and that of Whately's brother, the vicar of Cookham in Berkshire, who claimed that he had saved £15,000 in poor rates in eight years by setting paupers to cultivate "gravelled" soil, she succeeded in making them accept her views. They agreed that more "beach" land should be developed with pauper labour, each pauper to be paid by the parish for actual work done, and to be allowed to keep his crops after he had repaid the parish for the clay and soil.

Lord Liverpool, to whom she sent some specimen potatoes grown "on the beach," generally approved of the plan, though he admitted that he had a poor opinion of the Sussex labourer who drew on the poor rate "by habit" more heavily than the labourers in any other part of the country. This Mrs Gilbert strongly denied; she told him that when she had asked labourers whether they wished to emigrate they had invariably replied: "There is America in England." "There is," she said, "far more intelligence amongst labourers than those suppose who have not questioned them, they eagerly read the papers in hopes of the promised amendment of the Poor Laws, and say they believe the Government has forgotten them." In a public letter of November 1833 to the overseers of the parish of Eastbourne, she pointed out how in 1832 between four and five thousand pounds had been spent on the relief of those "not infirm" who were indignant at being kept useless on the roads in sight of land going out of cultivation, while they watched foreign corn being imported from Newhaven by land carriage to Lewes "with heavy tolls."

It is not surprising therefore that Mrs Gilbert early became a member of the Labourers' Friend Society, for its aims coincided with her own. Having proved that labourers would work even on land which they had to reclaim themselves, she was convinced that the amelioration of their condition was bound up with allotting them land at a fair rent which they could cultivate by spade husbandry. The allotment system and educating the labourer in good husbandry were the key to restoring independence to the peasantry of Sussex, especially if supported by sound moral teaching. When she let land to be turned into allotments, each tenant received a printed card bearing these words of pointed advice:

"Two glasses of gin every day at three half pence a glass cost four pounds eleven shillings and threepence a year, which would pay for:

	s.	d.
A Man's shirt	6	0
A pair of men's stockings	1	9
A pair of women's stockings	1	6
Shift and Muslin Cap	3	8
Printed Cotton Gown	5	6
A man's Cotton Shirt	4	0
A man's fustian Coat	16	0
A pair of Blankets	12	0
A neck Handkerchief	1	4
A pair of men's shoes	8	6
A pair of women's shoes	4	0
A Flannel Petticoat	2	6
A Coarse Cloth Cloak	7	0
A quilted waistcoat	4	0
Fustian Trousers lined	7	6
A pair of Cotton Sheets	6	0."

Edwin Chadwick thought this excellent, but wondered if much could be done in a locality by a group of individuals without the support of the Government. In a letter of 9 December 1833 to Mrs Gilbert he urged that "the landowners should unite with the labourers and get up petitions praying the parliament to put an end to all local discretion and abuse and appoint a special agency for dispauperising the country." Research of the kind that Mrs Gilbert was doing was necessary if the New Poor Law Bill of 1833 was to provide this special agency which Chadwick

had in mind. Its provisions she found profoundly disappointing—nothing about bringing more land under the plough, growing more wheat, making bread cheaper, encouraging more investment in land, solving the problem of the unemployed. "We make bread dear by paying a double set of labourers," she said, "our own for standing still against their wills, and foreigners for growing the food we buy." This she believed was the core of the trouble, and not, as the Lord Chancellor stated, that "able-bodied men prefer a small sum in idleness to a large sum in wages." Using all her powers of persuasion she called upon men of influence in Sussex to devise some method of determining whether a labourer would work or not before he and his family were forced into the workhouse. Nothing is more remarkable than the courage and persistency with which this woman advocated measures to see that the labourer had a fair deal, and she did not lack support. On 10 April 1835 the Guardians of the Poor of fourteen parishes from Seaford to Pevensey, on the invitation of the Poor Law Commission, met at Eastbourne, and not only protested against the forced separation of man and wife, but issued the following statement. "Nine paupers, for ten weeks up to January last, on the bleak downs near Beachy Head, drew in their Hand Carts and for £6 an acre, the same quantity of Chalk for which Surveyors allow a quarter part more, that is £8 for this labour when performed by cattle, for which hard work the poor fellows expressed themselves thankful, stating that they liked it far better than being on the roads useless."

In spite of the new Poor Law, she proceeded to develop her allotment system and to think out methods of improving the whole business of husbandry. She advocated supplying workmen's cottages with tanks to catch rain-water, and experimented on her own farms to show that a tank 12 ft by 7 ft was sufficient for a large family and six horses. One tank 23 ft by 11 ft was built for the Eastbourne Union and was more than sufficient for all the uses of its 150 inmates. The tanks she had in mind were of two kinds, the more familiar barrel-shaped butt resting on the ground and covered, and a more elaborate kind which was dug out of the ground. One built by the Eastbourne Vestry was 20 feet deep, 10 ft in diameter, cased with a flint wall 9 inches thick, the whole covered in with grey lime mortar and domed over by brickwork "in the Egyptian manner." It was claimed that soft water, thus stored, was good enough for drinking, and especially if the water was filtered by placing inside the tanks a board covered with pebbles, sand, or powdered charcoal.

From Cornwall, through a Mr William Gill of Chacewater, she collected evidence to show that broadcasting wheat was wasteful, and that dibbling it produced a higher yield, as well as being more economical. Gill achieved this by placing three grains of wheat into a hole measuring 4 inches in depth and 7 inches across. But as she was not satisfied that dibbling was more satisfactory than drilling, she gave £10 to the Labourers' Friend Society to ascertain "the comparative produce and cost of broadcasting, dibbling, and drilling of wheat." She investigated the best method of stacking wheat in the open to protect it from rain and advocated the Cornish "Arish Mow." In Cornwall, which she often visited with her Cornish husband, she had noticed the practice of threshing the grain and storing it on the floor above the cattle shed, where it remained free from damp and vermin, a method also practised in Switzerland. To her labourers in Sussex she therefore passed on the advice of stacking the wheat like haystacks on stone piles, rather than in barns. She was tireless in circulating information about the advantages of forking the soil, of the stall-feeding of cows, and of the value of conserving liquid manure. Whenever she let land, the terms always included the improvements which she was trying to introduce. A tenancy could be forfeited if it was proved that any hay, straw, and manure had been left to waste on the roadside. The printed terms of a lease always included the advice, "It is recommended to fork the land as soon as convenient after Michaelmas, laying it up

in ridges for the benefit of sun and frost." Competition was also encouraged, as the following notice shows. "One penny, three half pence, and twopence per ear will be given in 1843 by Mrs Gilbert for the greatest number of ears of wheat from one grain, the plant being produced complete at the next Battel Horticultural Show."

The success of the allotment scheme may be gathered from the fact that while in 1830 Mrs Gilbert had some fifty allotment tenants, this number in 1835 had increased to 213, all of whom (with the exception of two), it was claimed, had, through their products, paid their rents. A reason advanced for this success was that she gave to each tenant a card, on one side of which were printed hints about the use of manure and how to make a compost heap, while on the other side were printed injunctions about Thrift and the value of Ready Money. The latter are worth reprinting.

"It makes all the difference to comforts and character whether a man takes up all his things at the shop as he wants them and then pays for them on the Saturday night, or whether he carries the money in his hand when he takes up the goods. In one case, he will always have the feeling of being in easy circumstances; in the other, he feels that he is a poor man; yet in both cases he has the same income and spends the same, except that when he has the ready money he can go to what shop he pleases and so makes his money go much further; and the shopkeeper too, is much more glad to see him and thinks better of him. And all this difference is made by just contriving to have one week's pay forward instead of backward; to live, not one week under another, but one week over another."

The *Sussex Advertiser* of 9 April 1844 described this allotment system as one of successful "home colonization," implying perhaps that if it were generally adopted it would do much to reduce the desire for overseas emigration. One observer, Mr J. I. Burns of the Labourers' Friend Society, wrote to the secretary describing a visit he had made to an allotment tenant at Javington. Here he had found the man and his family, together with an aged mother, living in a cottage to which was attached a small shed for the stall-feeding of cows, and adjoining that a tank for the drainage of liquid manure. He worked three acres of land, two and a half of which were arable. The best crop at the time of inspection was the mangel-wurzel because it was fertilized by the liquid manure. It would seem that Mrs Gilbert had insisted that the tenant should experiment with the stall-feeding of cows, in return for which she had advanced him £5 to buy a cow. This he had repaid at the rate of 1s. 6d. per week, and was convinced that as a result of his trials cows gave more butter when stall-fed than in the open air "as 7 lb. to 5 lb." An examination of the tenant's accounts showed a flourishing state of affairs.

From 16 January to 26 July 1840, 278 lb. of butter made, sold at 1s. a pound				£13	18	0
2 calves sold for				5	18	0
Milk for the year, sold and given to the pigs				10	0	0
Probable produce of 88 rods of wheat at 8s. a bushel, say 19 bushels				7	12	0
Ditto of 40 rods of oats, at 4s. a bushel, say 14 bushels				2	16	0
Probable amount of butter for rest of year				6	8	0
				46	12	0
Deduct rent and rates	£12	12	0			
Deduct seeds	2	0	0			
Deduct Hired Labour	2	0	0			
				16	12	0
				£30	0	0

Burns's final comment to the secretary of the Society reveals no doubt in his mind about the success of the allotment scheme. "Contrast this with the probable result of the poor man's fortune if he had not thus been rescued from destitution . . . he gives to his country, by thus giving to his family, a considerable income; he saves to his country, by not becoming burdensome, another considerable increase."

Sydney Smith was almost equally enthusiastic. Writing to Mrs Gilbert in February 1841 he agreed that it was sound in principle to let the poor have small allotments of land.

But he was not quite sure about the stall-feeding of cows, still less about the general application of the principle of advancing money to buy cows. "I am not so sure about the cows, and as long as they live, it is very well, but who is to ensure this? And to replace the loss? In half an hour a poor wretch is hurled from the beatitude of his milky way upon the bare earth and if he has not the good fortune to live near Eastbourne he cannot get up again." Gently but firmly and in a tone of good-natured banter, he suggested that the stall-feeding of cows might be modified. "I have always considered the pasturing of cattle to be a perfect barbarism in agriculture —suppose Guillemard's[1] servants were to walk over their Bread and Butter and lay down upon it?" he questioned, and added that perhaps the cows ought to be let out for two or three hours a day in the open air, for "without this their health is apt to give way."

Seymour Tremenheere added his own testimony. "Re your mode of cultivation I have no doubt. There is a mine of wealth of moral and social good in the undeveloped resources of the land of England, the value of which it would be difficult to over-estimate. It is but beginning to be opened. Your example, however, must have greatly contributed to draw attention to it." (Letter to Mrs Gilbert, September 1842.) Tremenheere was speaking as one of the first inspectors of the Council of Education, and he had a special reason for writing to her, because he had been instructed by his Council to visit and inspect what was perhaps Mrs Gilbert's greatest achievement. This was the founding of two agricultural schools, one at Willingdon and the other at East Dean.

Tremenheere had been called upon to furnish a report on the industrial schools of the country, as provided for by the Poor Law Amendment Act, but these "self-supporting agricultural schools" of Mrs Gilbert's were part of the tradition of the older craft schools. The main idea was to teach the children of allotment holders the rudiments of education, employing a master to do this who would otherwise have been in the workhouse, and paying him by the labour of the scholars. George Cruttenden, the first master of Willingdon School, has described how his school functioned. To his twenty scholars he taught reading, writing, accounts, the church catechism, the collects and psalmody, "on the National plan with the approval of the vicar." For this he received no salary, but took a fee of one penny per week from each scholar, and taught them from nine o'clock in the morning until midday. After a two-hour break, the children again assembled, and from two to five in the afternoon they were engaged in helping him to cultivate the land. Of this voluntary activity, Cruttenden recorded: "I have not lost one from dissatisfaction and I am glad to say that they willingly assist me." For the School House he paid an annual rent of £10, and £15 for the five acres of land which he farmed. This he claimed he easily paid through the sale of his produce, although he had no salary and had to maintain a wife and four children. The school institutionalized all the ideas which had become identified with Mrs Gilbert. The building had attached to it the usual shed for the stall-feeding of cows, the tank in the rear to draw off the liquid manure, the tanks to collect roof water, a pigsty, beehives, and storage above ground for grain. The same pattern was to be seen at the second school, opened in 1842 at East Dean, whose master, J. Harris, had once been a pauper with his wife and five children in Eastbourne Union. It was claimed that their keep in the Union at 3s. a head cost the rates £54 a year, "equal to the rent of 273 acres let as a sheep walk at Eastbourne at 4s. an acre—but he now maintains himself on five acres," said Mrs Gilbert. The link between labour and learning, which these schools fostered, was strengthened by moral and social values, which Burns was quick to point out in his report to the Labourers' Friend Society.

[1] John Guillemard was the brother-in-law of Mrs Gilbert's husband, Davies Gilbert, President of the Royal Society. He had been a member of the Land Commission set up to enquire into disputes after the American War of Independence.

"Now the education received here is such as is exactly needed for the probable destination of the children hereafter and calculated to improve their moral and physical condition in this world and to lay the basis of their eternal welfare hereafter; it cannot fail and there are thousands who may read this able to do the like, with the like probable and most important results."

Mrs Gilbert was less interested in the results of her work in a future life than in their immediate effects on the economic welfare of the labourer here and now. There is no doubt that her experiments attracted wide attention. She wrote a paper on "The Allotment System" which was read on 7 February 1844 to the Highland Agricultural Society at Edinburgh, with the Earl of Rosebery in the chair. A report on the Self-supporting Agricultural Schools was published in *Chambers' Edinburgh Journal*, 6 July 1844. Edward Sabine in October 1844 asked her for a paper embracing all her experiments and this Lord FitzWilliam presented to the Statistical Section of the British Association. On the evidence of Henry Coleman, her allotment system aroused wide interest in the United States of America, the Americans being astonished that "so much produce could be obtained by manual labour." Lord Erne in Ireland, and the earls of Essex and Devon were frequently asking her for information, while Viscountess Tamworth wanted to found similar schools at Shirley in Staffordshire.

When she died on the 26th April 1845, it was already generally realized that she was one of the pioneers who sought to abolish poverty by encouraging labourers to grow their own food on land let at economical rates. This is her greatest title to regard, that with vision and humanity she rescued the "forgotten men" from their position of dependence on the landowners, and through spade husbandry taught them self-respect. This was part of a wider plan to prove that land was capable of a much higher rate of productivity, a lesson not completely learnt until the submarine menace of the 1914–18 War. Her self-supporting agricultural schools were a vital part of this wider plan and re-introduced the old principle of a relationship between labour and learning, again not entirely appreciated until the days of the University Extension Movement. As the *Sussex Advertiser* remarked in its obituary notice, "In carrying out this plan, her object was a double one, for it was a part and a valuable part of her system to show that, as Cobbett said of the gallows, idleness and the workhouse was the worst use to which a man could be put. Mrs Gilbert by her industrial schools and by locating a family on a given small area of land also managed to prove the error of supporting the pauper population of this kingdom in idleness and of their continuing as mere consumers when they might be much better employed as producers of wealth."

Notes and Comments

THE BRITISH AGRICULTURAL HISTORY SOCIETY

A one-day conference was again held jointly with the Association of Agriculture at the University of London Institute of Education on the 10th of December 1955. Three papers were given all of which related to some scientific aspect of agricultural history. This marked a change from the previous two conferences, which had been devoted to regional studies. The chair was taken by the President, Sir James Scott Watson, and about fifty people attended the conference, which was extremely successful.

The Annual General Meeting and Conference will be held this year at Florence Nightingale Hall, University of Nottingham,

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List of Books and Articles on Agrarian History issued since September 1954[1]

Compiled by JOAN THIRSK

BOOKS AND PAMPHLETS

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[1] The date of publication is 1955 unless otherwise stated. The compiler wishes to thank Mr George Green for help with this bibliography.

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NOTES AND COMMENTS (*continued from page* 51)

on Friday 13 April. Accommodation has been reserved in Hall for the nights of 12th and 13th April. Miss Audrey Beecham, Warden of the Hall, will be acting as local secretary for the conference.

MEMBERSHIP

The number of members of the Society has now reached four hundred. The Executive Committee is naturally anxious, however, that it should continue to increase. With this in mind a pamphlet giving information about the Society has been included with this issue of the Review and it is hoped that members will make a point of sending it to any friend who may be interested. Further copies of this pamphlet may be had on application to the Secretary.

Among recent new members have been libraries in Denmark, Finland, Germany, Italy, Japan, and Russia. The recent welcome increase in overseas members may to some extent be due to the efforts of the British Council, which circulated copies of the Review to its reading rooms throughout the world. Whatever the cause, however, it is a trend which we may hope to continue.

Letter to the Editor

THE RABBIT IN ENGLAND

SIR,—Is there any reliable information about the date of the introduction of the rabbit into England?

From the field-name 'Conygar' here on the old manor of Blackford and elsewhere (e.g. Dunster) it appears that the Normans may have been responsible.

Where was the original home?

Yours truly,

J. K. RIDLER

Minehead.

[A charter of 1176 refers to the taking of wild rabbits in the Scilly Isles. Does any reader know of earlier evidence?—ED.]

Book Reviews

W. G. Hoskins, *The Making of the English Landscape*. Hodder and Stoughton, 1955, 240 pp. 25s.

Dr Hoskins's work on the English landscape has opened a department of historical studies which is of interest to the specialist as well as to the general public. It has its own clearly defined objectives with its appropriate instruments for attaining them, and it calls for a combination of techniques and attitudes that can only be acquired as a result of careful training and strenuous preparation. If, as may be the case, it is taken into the canon of academic 'subjects', it will certainly not be found among the soft options.

The basic requirement is a knowledge of archaeology and of economic history; but an indefinable feeling for landscape, which is more the result of endowment than of training, is also necessary. Perhaps, in the last resort, it is a study intended for those in whose veins the blood of their farming ancestors still runs and feeds the imagination with memories which a large-scale map or a view from a church tower will recall to life.

In the early chapters the archaeologist is entrusted with the main theme, but the historian has some interesting and thought-provoking passages, and the relation between changes in the landscape and underlying agricultural techniques receives frequent emphasis. Perhaps this ought to be still stronger. It was for agricultural purposes that settlement took place at all, and the relation between the actual implements of cultivation and the Bronze Age corn plots, the Iron Age square fields, and the long strips of the Roman villas and the English settlers is strictly relevant to Dr Hoskins's theme. It is perhaps a little confusing to have villages "with enclosed fields of Celtic type" side by side with Roman villas in "large open fields" without some explanation of the technological reasons for the difference; and to explain the Kentish square fields in terms of the turnwrest plough "which could produce either strips or square plots, and either of these shapes could be associated with open-field agriculture" does not carry us very far. There is a footnote reference for which we are grateful, but the intricate problem of the Kentish field system is not disposed of in the few lines which Dr Hoskins devotes to it. And can we discuss balks (in the Seebohm sense) and ridge and furrow without entering into the technicalities of ploughing? The plough with a fixed mouldboard, as Dr Hoskins says, would leave a wide furrow between the lands, so that balks could be—and perhaps were—dispensed with; and all land so ploughed would be in ridge and furrow though not necessarily in 'high-backs'; on light soil the ploughing would be practically flat, but the lands would still be separated by wide furrows so that balks would be no more necessary than on heavy soil. It is worthy of note that of the many aerial photographs that have appeared of ridge and furrow on deserted medieval sites not one suggests that balks existed, and examination on the ground has not supplied the missing evidence.

It should perhaps be taken as a delicate tribute to the late Dr Orwin that no explanation is anywhere offered of the actual process of ploughing, and that no mention of his famous book on the Open Fields is made in any of the recommended reading; but as one who has tried to introduce modern town-bred youth to the alien mysteries of field systems and landscape study, this reviewer would plead for a constant recapitulation of the mechanical basis of the art of cultivation; and for triumphant demonstration of the part played by ploughing in the making of field patterns it is not necessary to go further than the masterly article in the last number of this journal by Dr Eyre, the findings of which must surely be incorporated in any future edition of Dr Hoskins's book.

Even if Dr Orwin is so well known that he can be ignored, the subject of his study, the open fields of Laxton, might have been

allowed to speak as the only surviving example of the authentic open-field village (as distinct from remnants of open fields). As Dr Hoskins says, no poet has arisen to describe the life of the open fields before they were extinguished by enclosure (though there is an effusion in Latin, as he no doubt knows, celebrating the benefits enjoyed by a village in Northamptonshire *after* enclosure); but Mr Rose, the bailiff of the Manor Court of Laxton and farmer of 70 acres of which all the arable is in the three open fields, has a story to tell which is not without its poetry, though it smacks more of Crabbe than of John Clare. And when Dr Hoskins writes, under a picture of a deserted Leicestershire village, "here we have an entirely medieval scene," it is worth remembering that a view from Laxton church tower provides the best picture England can offer of a medieval village that is still alive. It has recently been bought by the Ministry of Agriculture in order to avoid piecemeal sale and enclosure, and though the tenants are a little apprehensive at passing out of the hands of an ancient family into those of the Welfare State, they go on as before and the village still lives. Let us sometimes praise famous survivals as well as lament forgotten losses.

Throughout the book Dr Hoskins presents us with a succession of bright ideas and new points of view to which students of the rural and urban landscape will return again and again. His book may be enlarged and improved but it is difficult to think that it can ever be superseded. While using archaeology and economic history as instruments, not ends, he throws new light on both. In regard to economic history—the only tool in his well equipped workshop that this reviewer shares with him—he raises many questions which invite discussion. He speaks of depopulation in late Roman times, and refers to the farms and villages, silent and in ruins, which the Anglo-Saxons found and in many places inherited. Much of the arable land appears to have been given over to sheep pasture, and the Germanic invaders seem to have occupied, if not an empty land, at least a land where "most of these [the villages] were probably deserted by the fourth or fifth century" (p. 42). If this is the case, the age-old problem of racial continuity largely disappears, together with the supposition that there may have been continuous occupation of village sites on any significant scale. Dr Hoskins is not satisfied that any such site has yet been satisfactorily established, though there are "exciting clues" to suggest that some may yet be found. And it would be interesting to have Dr Hoskins's views on the origin of the numerous slave population of Anglo-Saxon England.

A contribution which all economic historians will welcome is the reference to the two building booms of 1570–1620 and (*circa*) 1690–1720. Of the first, Dr Hoskins says very rightly "it was an age of profit inflation for farmers as well as merchants and industrialists" (p. 122); but since farmers were many times more numerous than merchants and industrialists put together, the economic impact of their prosperity represents a factor in the history of economic change to which justice has not yet been done. The coincidence of Dr Hoskins's visual evidence of agricultural profit inflation with Professor Nef's industrial revolution of the same period will not be lost on students of the subject.

The second building boom is even more interesting. It was especially marked, he says, in the Midlands and the North, and as regional historians know, it coincided with expansion in every department of the local economy. The parish registers show that it was also a period of substantial population growth. The study of the landscape corroborates the view derived from more conventional sources that this was a period of boom, and that it ended with the commercial collapse of 1720 and the beginning of the demographic depression of the following two decades.

Dr Hoskins has an unrivalled eye for the detail which others overlook: the increase in the singing-bird population as a result of the enclosure of fields with white-thorn hedges; the fox covers laid out by the fox-hunting

gentry; the furlong brought in from the waste perhaps in the twelfth or thirteenth century and cutting across the direct path of the next village; the absence of lanes in recently enclosed country; and—on the subject of roads and green lanes—the "immense continuity of English boundaries." To the subject of roads Dr Hoskins brings an almost poetic insight, and the treatment of canals and railways provides some of his most evocative pages. On the landscape of towns he has a chapter of twenty pages which bring together what little is known of this neglected subject; but it is a pity that all he can do for the landscape of today is to blot it out with the boiling lava of his quite unhistorical and undiscriminating rage.

On this subject, the poet in Dr Hoskins gets the better of the historian; the techniques of the London School of Economics in which he was trained are yoked with the brooding nostalgia of Wordsworth and John Clare, and the result is sometimes a flurry of feet and a cloud of dust, including, as we have come to expect, a quantity of mud at the expense of the Royal Air Force. But the desiccated calculating machine of the economist goes on grinding all the same, and there are times when it conveys a message which should be taken into account by the lovers of the pre-industrial landscape. Its beauty depended partly on the maintenance of a particular ratio between space and numbers of inhabitants, and this in its turn depended on the fact that the latter died almost—but not quite—as fast as they were born. When, in the villages and towns during Dr Hoskins's "flowering period" of England, the seventeenth and early eighteenth centuries, it is found that burials rose again and again above baptisms; when in Nottingham, that "Paradise Restored" (p. 218) between 1732 and 1739, there were 1022 "infant" burials out a total of 2226; when in the beautiful city of Norwich John Evelyn noticed the naked corpses piled high on one another awaiting decomposition because there were too many to bury; when the poor who lived outside the newly repaired walls of Chester were so rank with disease and filth that the respectable citizens who lived within the walls held their noses and gave them a wide berth; when gibbets, for those who survived the hazard of infancy, were so numerous that travellers are said to have used them as landmarks, there is some reason for thinking that the melancholy lucubrations of Wordsworth on the coming of "social industry" to the countryside and the lament of poor Clare for his vanishing commons are a very partial rendering of the still sad music of humanity which these writers—and Dr Hoskins—are at pains to convey during the period of transition to the industrial age. There were features in the landscape of the "flowering period" of England which would have offended Dr Hoskins if they had survived; and it is surely a weakness of the aesthetic interpretation of history if its judgements are to be determined by the superior durability of the dignity of free-stone compared to the evanescent squalor of stud-and-mud.

If Dr Hoskins's complaint is that the industrial age condemns men to live as tools of the productive process rather than as human beings, many would agree; but the fact has to be faced that the industrial process has made possible a vast increase in the number of those who can live at all, and some of their efforts to come to life in a fuller sense might well fall within the purview of the historian of the landscape. Is there no significance in the individuality which is sometimes seen in domestic and institutional building, in the loveliness of flowers and trees which sets off many of our most commonplace houses and streets, in the parks and open places where twentieth-century man can possess his soul in quietness if he likes? And a reference to the post-war Dutch landscape as an example of what can be done by imaginative corporate planning would not have been out of place. The twentieth century may be doomed, but it is not yet dead. Some would say it is very much alive.

But whatever we may think of Dr Hoskins's views on the twentieth century, his preeminence in the field which he has made so

conspicuously his own is unchallenged and unchallengeable. He has not only opened up a new branch of historical study, but in a single slim volume has placed it on a firm foundation for further development from prehistoric to modern times. This is a remarkable achievement and has come when it was most needed. It provides an organized centre of resistance to the tide of vulgarity and sheer vandalism which threatens to engulf the historic English landscape, and by its uncompromising challenge it stimulates the expression of the vital forces of our own age. Dr Hoskins thinks it is irretrievably lost. It is one of the special virtues of his book that it will help to prove him wrong.

J. D. CHAMBERS

R. B. PUGH and ELIZABETH CRITTALL (eds.), *The Victoria County History of Wiltshire*, Vol II. Geoffrey Cumberlege, O.U.P., 1955. xviii+246 pp. 63s.

This, the second volume of the *Victoria History of Wiltshire*, is virtually a work by one hand, Professor R. R. Darlington having written seven of its eight sections. It is natural to think of it as the Domesday volume, for a text from the Exon Domesday smiles austerely from the dust-jacket, and Domesday and its satellites with their several commentaries occupy one hundred and eighty of the two hundred and twenty-odd pages of text. Such a short title, however, would do less than justice to the editor's intentions, for its contents are explicitly described (p. xiii) as including a survey of "all aspects of Wiltshire civilization from the seventh century to the eleventh."

Readers of the *Agricultural History Review* may expect such a survey to comprise an account of the Saxon settlement and economy of the shire, referring closely to its topography. If so, they will be disappointed. This is not entirely because a discussion of the Domesday Survey is bound to overweigh, in a volume of this size, the history of the centuries that preceded it. The impressiveness of Domesday Book, and the difficulties that its study entails, naturally focus the historian's attention upon it. Yet it may be asked whether in a volume of a county history in which material from Domesday Book is included, both as a commentary upon the end of the Dark Ages and as a great historical source whose elucidation is still in progress, it should be allowed to dwarf the earlier history in this fashion. And if it be urged that the documentary material of earlier date than Domesday is indeed very slight in comparison with the Survey, then surely that fact enhances the value of all supplementary evidence, especially that of topographical enquiry? Professor Darlington does not accept Dr G. M. Young's arguments for continuity between some Romano-British and Saxon settlements; he observes that the Saxons eschewed the uplands in favour of sites in the valleys of streams, but he says very little about what they did there. If Britain was really severed from her past by the Saxon invasions and her economy modelled entirely anew, the process by which the revolution was effected and maintained might be thought to merit exhaustive study. The outlines of the political and ecclesiastical history of Wessex have been drawn in other works, and we are not presented here with anything more than this conventional skeleton.

Only one manor in Wiltshire is described in the Exon Domesday, so the text of the Exchequer Domesday is not, as is its account of other south-western shires, duplicated and supplemented by that manuscript; but the Exon Domesday does contain three texts of geld rolls for Wiltshire, and these, translated and collated, add considerable weight to the Domesday section. The reader who turns from the translation to the commentaries will find no lack of information. The text will tell him what Domesday says, but he will not as readily discover what he is to make of it. The interpretation of Domesday's information in geographical terms will have to wait for the relevant volume of Professor Darby's survey, though even then the enquirer may find himself referred back to some such discussion of technicalities as the Victoria County Histories ought to provide. These technicalities make for reading that ranges

from the difficult to the prohibitive, and here the difficulty is increased by the existence of the geld rolls. Professor Darlington dismisses Professor V. H. Galbraith's argument that the geld rolls depend upon the Domesday Survey and are not earlier than 1086, but their discrepancies still exist; he admits, indeed, that "on some matters it is unlikely that any two scholars would ever reach agreement" (p. 177).

It may be noted in passing that if the V.C.H. convention of rendering *masura* by messuage is now to be discontinued, so ought that of translating *servus* as serf.

One's surprise in finding seven pages accorded to a chapter on Saxon art in Wiltshire is not abated by reading them.

G. H. MARTIN

V. R. WEBSTER, *Cruck-Framed Buildings of Leicestershire*. Reprinted from the *Transactions* of the Leicestershire Archaeological Society, XXX, 1954. The Guildhall Leicester. 32 pp. + plates, figures, and folding table. 6s.

To review a single article from a local journal is unusual; the Leicestershire society is to be congratulated for making articles available, and one wishes that all local societies were as cognizant of the wider interest that particular contributions to their transactions may evoke. The article is also an indication of the valuable field-work that members of a local society, without specialist training, can do: members of the Vaughan College Archaeological Society have helped to track down these houses, and one must echo Mr Webster's tribute to them.

The article makes a valuable contribution to the study of peasant houses. The distribution map shows that cruck building was widespread in Leicestershire; examples are scarce on the eastern limestone uplands, but, as we know, the jurassic ridge was an interruption and not a barrier. The concentration in the north-west of the county shows that timber from the waste of Charnwood Forest was an important source, though more than geographical factors are needed to explain the distribution in detail. In the case of a village like Rothley, where cruck houses are so plentiful, one would like to know more about local conditions of land tenure; had the medieval sokemen become freeholders or copyholders? Mr Webster has good photographs and some scaled drawings and plans. He is aware of the importance of recording details of construction, and the plans of the best examples, at Hoby and Rothley, are most valuable. One observation which may be new is that crucks were sometimes pierced at the foot, so that ropes could be passed through them while rearing the house. One instance is quoted from Twyford in east Leicestershire of the common East Anglian practice of filling panels with upright stakes inserted in the main timbers. In many cases all that Mr Webster can do is to record surviving details of frames which have been in part removed or obscured by later work.

The most difficult problem is that of dating cruck construction. It does not seem possible to regard the position of a house in relation to the road as an indication of date, nor are crucks planted directly on the ground necessarily older than those mounted on bay stones or on a stone plinth. One wishes, however, that the author had tried to use such features, together with constructional methods, to suggest a more detailed chronology; it might have been hypothetical, and open to error, but it would have been a start. It is tantalizing to have only a verbal reference to mouldings together with *upper cruck* construction on the newer part of the house at Thurcaston; they can no doubt date it, and help to date the older portion. Will Mr Webster go on to do a detailed study of that house?

M. W. BARLEY

A. R. BRIDBURY, *England and the Salt Trade in the Later Middle Ages*. Oxford University Press, 1955. xiii+198 pp. 21s.

Salt, in the 'storage economy' of the Middle Ages, as the late Professor Hecksher has pointed out, was a commodity of long-distance trade whose importance can nowadays hardly be grasped. Without it, meat and

above all herrings would not have been available as food; and perhaps barley would have been a less important medieval crop, since the enormous medieval thirst for beer was the consequence of eating salted food.

England was fortunate in the early Middle Ages in her brine springs in Cheshire and Worcestershire and her east coast salines. She was able to supply her home needs for salt, and even to export, through both aliens and denizens, perhaps a thousand pounds' worth or more a year in the early fourteenth century. But from the 1360's onwards England ceased to be a salt exporter, and became an importer of this still vital commodity.

This change is the central fact, while not constituting the greater part of the content of Mr Bridbury's book. For in the comparatively small space of 150 pages the author also gives us the essential facts about the main European areas of production, their techniques of production, their connection with the herring fisheries (Lüneburg with the Scania fisheries, for example), the changes in the pattern of the international salt trade, and the forms of local distribution in England. He shows how the salt produced from the salines of the Atlantic coast of France (especially from the Bay of Bourgneuf) conquered the English, Low Country, and Baltic markets because of its cheapness. For although inferior in quality, it was still cheap enough to be worth while importing for further refining and use by the Low Country fisheries.

The story is quite straightforward in its main outlines, but Mr Bridbury also fills in, with both skill and economy, some highly significant details. His treatment of the political events and social structure of fourteenth- and fifteenth-century Brittany and Poitou is a case in point, and incidentally a comment on the grave limitations of 'pure' economic history. Of even greater interest is his deft account of conditions in England which prevented the expansion of the English salt industry when the German and Low Country industries were declining. He emphasizes that the late fourteenth century was precisely the time when the expanding country cloth industry was attracting labour which might otherwise have been available. Mr Bridbury's refusal to become straightjacketed in the over-simplification of the stagnation theory of later medieval development is worthy of note by agrarian historians.

It may be that the statistical side of Mr Bridbury's study will stand up least to further examination. His calculation of the total volume of the Bay Salt trade in the middle of the fifteenth century depends on too many dubious factors to be convincing. And recent suggestions by some French historians that English customs figures are not as impeccable as we had thought them to be may undermine some of Mr Bridbury's other figures. However, no work is ever definitive, and meanwhile Mr Bridbury is to be congratulated on a model study of a problem of economic history in its total setting.

R. H. HILTON

JOYCE YOUINGS (ed.), *Devon Monastic Lands: a Calendar of Particulars for Grants, 1536–58*. Devon and Cornwall Record Society, 1955. xxxviii+154 pp. 30s., from Mrs Miller, 7 Cathedral Close, Exeter.

The redistribution of estates that followed the Dissolution of the Monasteries was the greatest upheaval the English land-market has ever known. Its economic and social effects must always engage the attention of historians. Of the abundant documentary materials, many have been printed; but in the volume under notice the lately resuscitated Devon and Cornwall Record Society publishes a calendar of certain records which have been comparatively neglected until now. These are the Particulars for Grants, containing brief surveys and valuations of all the monastic lands in the county of Devon that were disposed of by the Crown from the Dissolution to the end of Mary's reign. All students of the subject will be indebted to the society and to the editor, Dr Youings, for this scholarly and fully annotated publication. In a valuable introduction Dr Youings describes the machin-

ery of redistribution and analyses its effect on the social history of the county. Her treatment of the largest grant of all, however, invites criticism. On p. xxi she speaks of the "quite extraordinary generosity" shown by Henry VIII to John, Lord Russell. On pp. 5, 6, she prints a provisional valuation, drawn up when the prospective grant to Russell had reached a total value of only £725. The fact that it was presently raised to £1000 or more, but that, so far from showing extraordinary generosity, the king reserved an annual rent-charge on the property of nearly thirty per cent instead of the normal ten per cent, is relegated to a postscript in small type. In this case, while the facts are stated correctly, their presentation leaves something to be desired.

H. P. R. FINBERG

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